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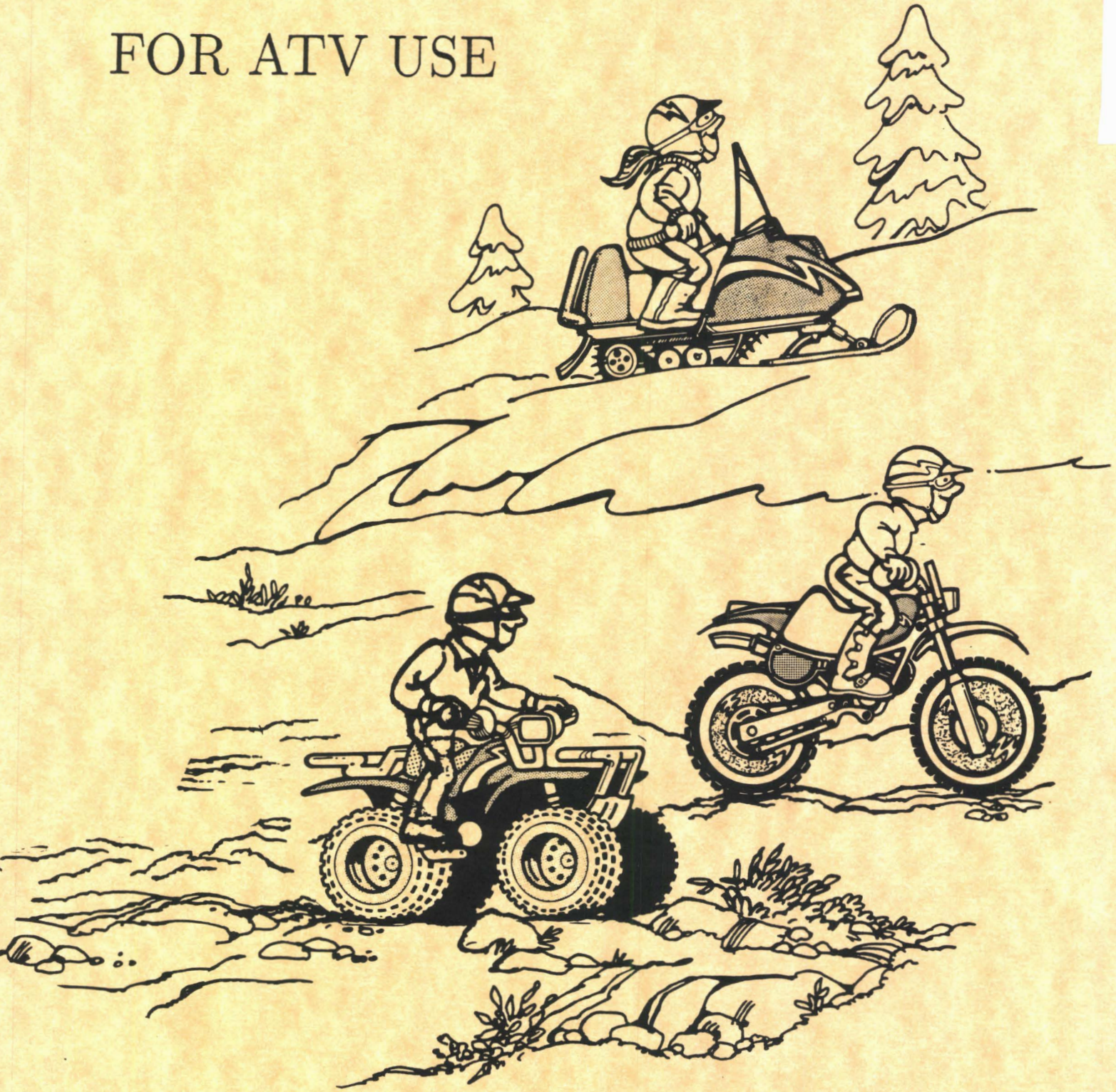
POTENTIAL LOOP TRAILS FOR ATV USE



ON THE FERRON RANGER DISTRICT

MANTI- LA SAL NATIONAL FOREST

Potential Loop Trails for ATVs (All Terrain Vehicles) on the Ferron Ranger District

Billy J. Dye
Forester, Ferron Ranger District
Manti-La Sal National Forest
P.O. Box 310, Ferron UT, 84523
(801) 384-2372

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Billy J. Dye
Forester
Ferron Ranger District
Manti-La Sal National Forest
Box 310 Ferron, Utah 84523
(801) 384-2372

Clemson Recreation Short Course of 1990

This paper was prepared as a student project in partial fulfillment of the requirements of the Professional Development for Outdoor Recreation Management Program at Clemson University. It in no way reflects USDA Forest Service Policy nor are the opinions expressed those of anyone other than the author.

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ABSTRACT

AUTHOR: Billy J. Dye
Forester, Ferron Ranger District
Manti La Sal National Forest
P.O. Box 310, Ferron UT, 84523
(801) 384-2372

TITLE: Potential Loop Trails for ATVs (All-Terrain Vehicles) on the Ferron Ranger District

Abstract:

Many National Forests are experiencing significant increases in recreational use by all-terrain vehicles (3 - and 4 - wheelers). The growing popularity of this form of recreation use has created a new dimension in recreation demand and a new set of problems that need to be managed. The public has a great interest in being able to ride these machines in National Forests. Although some areas and trails have been opened or developed on National Forests, further opportunities exist to provide for ATV use. Development of ATV trail systems also creates recreational opportunities for other uses including hiking, horseback riding, motorcycling, cross-country skiing and mountain biking.

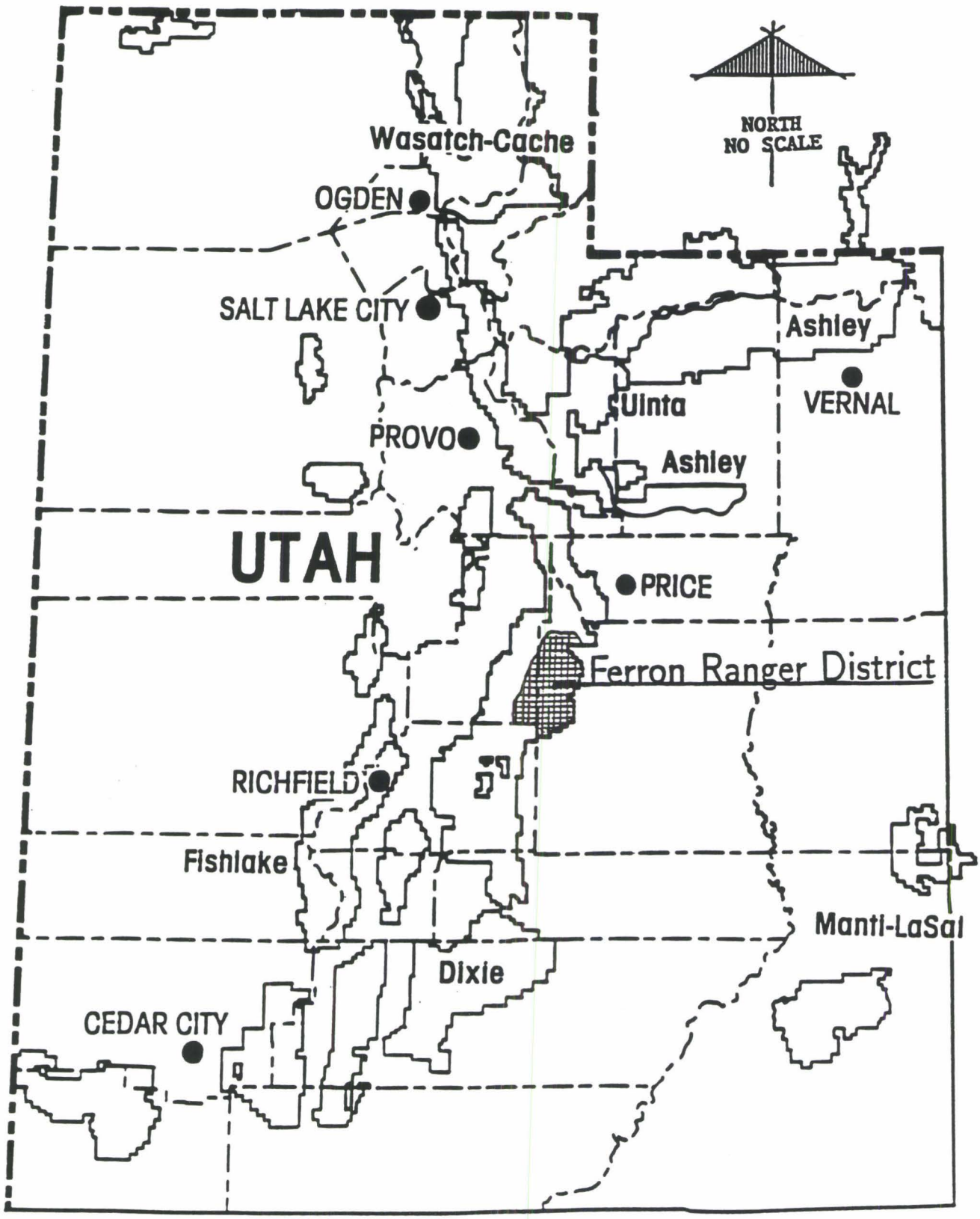
This paper documents a proposal for development of several ATV loop trails located on the Ferron Ranger District. The project will recommend trail systems that could be implemented as funds become available and as the Travel Plan is approved. This paper will provide a guide for similar projects that may also be implemented by other Ranger Districts or National Forests.

The Ferron Ranger District encompasses approximately 350,000 acres of the 1.4 million acres on the Manti-La Sal National Forest. See figure one for vicinity map and figure two for loop trail system map.

Keywords: ATV Trails, OHV, ORV, Three Wheelers, Four Wheelers.

Figure I

VICINITY MAP



Map 1, Spoon Creek Loop;
Map 2, Spoon Creek/Lowry Water Loop;
Map 3, Spoon Creek/Skyline Drive Loop;

Map 4, Reeder Canyon/Skyline Drive Loop;
Map 5, Reeder Canyon/Blue Lake Loop;
Map 6, Littles Creek Loop;

Map 7, Joes Valley/North Dragon Loop;
Map 8, North Dragon/Cap Loop;

Map 9, Ferron Reservoir/Georges Fork Loop;
Map 10, Ferron Reservoir/Skyline Drive Loop;
Map 11, Ferron Reservoir/Ferron Mayfield Loop;
Map 12, Ferron Reservoir/Hunter Highway Loop;

Map 13, Wrigley Springs/Reservoir Loop;
Map 14, Wrigley Springs/Muddy Loop.

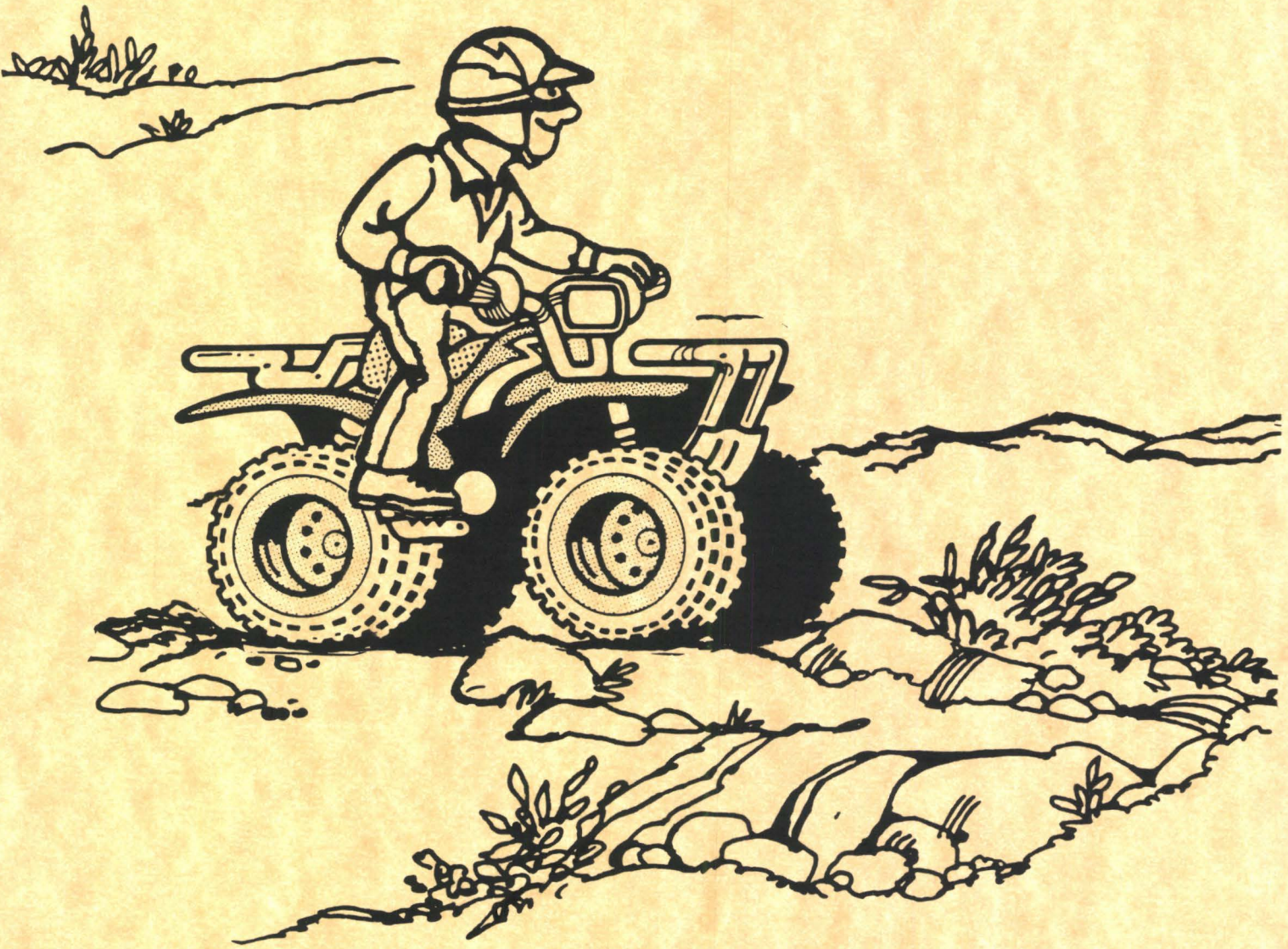
Figure 2

Ferron Ranger District
Loop Trail System

Trail Location

Trailhead location

INTRODUCTION



I. INTRODUCTION AND STATEMENT OF PURPOSE

The purpose of this paper is to document a proposal for development of loop trails for ATV use on the Ferron Ranger District and to provide a guide for similar projects that may be developed on other Ranger Districts. This paper will also present a description of each of the loop trails which will enable the users to determine which trail they would like to use. See figure one for vicinity map, and figure two for loop trail system map.

The Manti portion of the Manti-La Sal National Forest and also the location of the Ferron Ranger District is located in the central portion of the Rocky Mountain Forest Province and divided into six land associations including lakes, high plateaus, ridges and valleys, eastern clifflands, monoclines, and rolling basins. These surfaces features are the result of faulting, glaciation, and erosion.

Elevation on the Ferron Ranger District ranges from approximately 6,000 feet to a high elevation of 11,300 feet. Access to the district consists of primary, secondary and two track roads with several winding trails entering and exiting the roads at various undeveloped trailheads.

Most Ranger Districts on the Manti-La Sal National Forest have been experiencing the effects of the popularity of 3 - and 4 - wheeled ATVs. ATVs (all terrain vehicles), or further defined as any motor vehicles 40 inches or less in width, having an unladen

dry weight of 700 pounds or less, traveling on three or more low-pressure tires, having a seat designated to be straddled by the operator, and designed for or capable of traveling over unimproved terrain. (41-42-2(2) Utah Off-Highway Vehicle Act).

The two-wheeled motorcycle is a more infrequent user of trails on the district, and their use is generally limited to the more open areas or system roads. Motorized 3-wheeled or fat-tired vehicles joined by a more stable 4-wheeled vehicle has drastically out numbered the use of motorcycles. The day for ignoring the use of ATVs is a thing of the past and must be reviewed as the popularity of the sport continues. Industry estimates suggest that currently there are about 179,000 all-terrain vehicles in the state of Utah. If motorcycles and snowmobiles are added, this figure jumps to 200,000. One hundred fifty thousand ATV's will be traveling on the National Forests in the State of Utah during the hunting season alone (Ogden Standard Examiner). Nationally, 500,000 ATV's are sold each year (Parenti).

With the increase of ATVs, the demand for recreation resources has changed. According to a National Recreation Survey, among those who engaged in recreation activities more than four times during the past twelve months "driving vehicles or motorcycles off road" was as popular as boating and more popular than:

* Hunting,
* Camping in developed or primitive areas,
* Canoeing, kayaking, or river running, or

* Cross-country skiing.

This growing popularity of off-road vehicles require that areas be made available for their use. Although many backcountry forest areas are suitable for ATV use, a number of questions soon arose as to which areas could be used and what safety problems would be faced. Managers were quickly trying to determine where, and under what conditions ATVs would be allowed to operate and what regulations would apply. The ATV operators were asking similar questions.

The following challenges were faced by public policy makers, resource planners and managers as they tried to address these questions:

1. The impacts of illegal use to public and private lands.
2. Environmental impacts on the resource.
3. The effects of noise on wildlife and other users.
4. Conflicts with other recreation uses.
5. Where vehicles should be allowed to operate.
6. Safety considerations and who is responsible.
7. Licensing of operators and machines.
8. Distribution of current information.
9. Designation of trails and signing in conjunction with travel management plans and maps.
10. Identification and evaluation of the enthusiasts' needs.
11. Communication and cooperation among users, policy

makers, and resource managers.

12. Funding of ATV trail systems.

Although the challenges are great, they must be met. "Current environmental and social problems will be compounded by failing to provide for the needs of ATV enthusiasts." (Nicholes 1980).

ATV users that stop by the office, write, or call for information or make contact in the field are always asking, "Where can we ride?". Most users are concerned about what areas are legally open for ATV use.

On page III-2 of the Manti-La Sal National Forest Land Management Plan, it states: "offer a broad range of dispersed and developed recreation opportunities by providing appropriate recreation experience and setting levels." As dispersed recreation activities on the forest increase, use will need to be controlled or eliminated in certain areas in order to control resource damage and/or conflict with other resource uses while maintaining the desired opportunities and quality of the recreation experience. (Manti-La Sal National Forest Land Management Plan page II-24).

Currently there are no loop trails developed on the Ferron Ranger District or the forest. Only three known developed ATV trail systems exist on National Forests in Utah which include: the Taylor Fork - Cedar Hollow Trail and the Murdock Basin Trail on the Wasatch-Cache National Forest and the Bull Valley trail on

Fishlake National Forest. None of these forests focused on loop trail systems where the demand appears to be by our users. (loop trails start and end at the same point, or trailhead).

A news article in 1985 stated: "the growing popularity of ATV's requires the development of more areas or trails for their use -- in areas near to population centers and recreation areas." The Ferron Ranger District is now proposing ATV trails and trailheads near campgrounds and adjacent to heavy use dispersed recreation areas.

The forest can provide significant opportunities for ATVs but only in harmony with adequate restrictions, education and enforcement. Control of cross country use and management of ATV travel is dependent on the availability of a network of open roads and trails. Forest developed roads, if properly managed, can add significant ATV opportunities. However, research has shown that ATV users will not be satisfied if most opportunities are on established roads only.

Literature indicates that ATV use has peaked and will continue at present levels through the year 2000. Therefore, the ATV program should not seek to increase or attract additional use, but rather seek to provide opportunities for existing use.

The Ferron Ranger District can and will provide ATV opportunities in appropriate locations while protecting the resources. ATV problems will not go away, but can be successfully managed through planning and public involvement.

LITERATURE REVIEW

II. LITERATURE REVIEW

Today more than seven million people ride All-Terrain Vehicles (ATVs). In addition to recreational use, ATVs also serve agriculture, business, commercial industry, and nearly 700 government and law enforcement agencies with on-the-job transportation and other uses. However, most literature deals with ATVs in general. Quite often ATVs are lumped together with motorcycles. There is little documentation of the separate effects of ATVs or the needs of ATV users.

Discussion on the subject of all-terrain vehicles has been featured in numerous articles and periodicals including: Blue Ribbon Magazine - The Voice of Western Outdoor Recreation, The ATV Planner - The Off-Highway-Vehicle Planner Newsletter, Western Rider - The West's Off-Road Magazine, 4-H Magazine, Guns and Ammo, Field and Stream, Future Farmers of America, Utah Farmer, utility company publications, outdoor magazines and law enforcement publications.

An article about protecting and rehabilitation of ATV areas came to the conclusion that most trail damage was caused by improper trail location and construction rather than improper use. This article recommends that Forest Service administration of ATV use include: education/enforcement program; long-range planning; relocation and rehabilitation of sub-standard trails; rehabilitation of areas damaged; construction of barriers and

signing to restrict use while providing an alternate route; seasonal closures to provide for early seasonal hiker use, to protect critical wildlife areas and to prevent excessive soil erosion during wet seasons; and closing roads near popular campgrounds to conventional traffic to provide areas for juvenile riders (Dunnell 1980).

A major problem with Forest Service ATV management is its failure to implement the planning decisions it makes. Implementation involves two phases; (1) on-the-ground signing, mapping, and other methods of informing ATV users of local use restrictions; (2) enforcement of those restrictions (Reames 1980).

The free play or unrestricted use areas where riders are not restricted to roads and trails will probably exist in only a few areas on the entire forest since they are more difficult to manage. It is apparent that ATV use will be more restricted or controlled in the 1990's. More than anything, this means that management will be even more important to ensure user satisfaction and protection of the environment. Adequate provision of facilities is important to minimize any problems (Anderson 1980).

Makel (1988) advocates an ATV management philosophy best illustrated by a triangle: one side representing opportunities; the second side representing restrictions on use; and the third side representing education and law enforcement. If one side of the triangle is missing, ATV management is ineffective.

The Forest Service conducted a review of ATV management in late 1986. The findings reported in the National ORV Activity Review (USDA 1987) identified several policy areas needing attention: the combination of on-road and off-road use under travel management concepts; unlicensed vehicles and unlicensed drivers on forest developed roads; and the shift of management emphasis to road and trail opportunities and away from the open area concept. Activities that were found to be deficient were signing, "Host" programs, maps, use of engineering support, use of categorical exclusions, use of timber sale activities to create facilities that can be used for ATV recreation, conflict resolution techniques, and land acquisition for ATV purposes.

The Review also reported that:

1. Control of indiscriminate cross-country use and the management of ATV travel is dependent on the availability of a network of open roads and trails. It is critical that these facilities be managed (located, designed, and operated) in a manner that provides a range of recreation opportunities and requires a variety of user skill levels.

2. To provide a range of opportunities without incurring enormous additional capital expenditures for new facilities, will require portions of the forest developed road system to be made available for ATV use. With several hundred miles of existing roads on the system, ample opportunity exists to meet this need.

The Review found that several principles have evolved from efforts to manage heavily used ATV areas;

1. ATV problems are not going away, but they can be successfully managed.

2. A key ingredient to managing ATV use is providing a system of loop roads and trails that have varying levels of difficulty and riding times, and are laid out in a manner to protect the resources.

3. Staying in tune to ATV user needs is important to good management. Users are essential in laying out trail and road networks to meet the desired experiences.

4. Cooperating states with ATV funding programs have, and are playing, a major role in addressing National Forest ATV problems.

5. Forests with positive ATV programs generally exhibit good customer attitudes, ie, good "HOST" skills, good user information, and a good understanding of customer needs.

6. Closing of open area-wide use and the establishment of designated roads and trails have gone far to eliminate resource problems.

7. Organized user groups are an essential element in helping

manage ATV use. National user and industry organizations recognize this and have contributed greatly to getting groups organized and involved in volunteer projects.

Demand

The available literature indicates that ATV use has grown at a tremendous rate in the past, but has reached a peak and is now increasing at a very slow rate (Motorcycle Industry Council (MIC) all; Doyle 1980; CDPR 1980). Doyle's article points out that in the short space of 20 years, the number of Americans participating in snowmobiling has expanded from nearly zero to 14 million.

The motorcycle industry experienced phenomenal growth during the 1960's and 70's. Since 1960, motorcycle registrations increased almost tenfold, while automobile registrations have only doubled. Today it is estimated that 4.1 million motorcycles and ATVs are used for off-highway recreation in the United States (MIC 1988).

Based on consumer research (MIC 1988), motorcycles and ATVs ridden off-highway traveled an average of 449 miles in 1987. The majority (73%) of off-highway riding occurred in the spring and summer. Riding in rural areas accounted for 65% of the miles ridden off-highway, and weekend riding accounted for 68% of off-highway use.

Effects of Noise

Noise generated from snowmobiles and motorcycles has received considerable attention in literature. Central to an understanding of noise issue is the concept of "vanishing distance" (the distance under which ATV generated noise becomes inaudible above the always-present background noise). The Motorcycle Industry Council (MIC all) indicates that the vanishing distance within a wooded area varied from 1600 feet for a 76 db source to 12,800 feet for a 90 db source.

The sound of off-road motorcycles is one of the most often mentioned negative factors of off-road motorcycle operations. Some specialty racing motorcycles are loud enough to cause permanent hearing damage to the operator over a long enough exposure. Interference with the sleep or speech communications of bystanders is possible (Harrison 1980).

Effects on Private Property

Studies done by the Soil Conservation Service (Bridge 1980) indicate the following damages may occur either directly or indirectly as a result of ATV activities on private lands.

- Terrace systems may be damaged.
- Fences may be taken down, cut or otherwise made ineffective.
- Gates may be left open or broken.

- Roads and trails may be left so deeply tracked that the cooperator will need to grade or otherwise repair them.
- Tree plantations may be damaged.
- Wildlife harassment may occur.
- Ruts and other damage to fields may cause damage to farm equipment.
- Noise impacts.
- Vandalism and thefts.
- Aesthetics of the community may be marred.

Effects on Soil and Vegetation

The literature indicates some distinctly different effects on soil from snowmobiles than from other ATVs. For example, soils are affected little by snowmobiles (Aasheim 1980), but are substantially affected by other ATV's (Harrison 1980).

Soil temperatures beneath snow compacted by snowmobiles are significantly colder than those under undisturbed snow. The snow is also typically frozen to greater depths. Erosion can be increased particularly if snowmobiles use slopes with little snow and if the vegetative cover is affected (Aasheim 1980). Impact on soils and resulting erosion is probably the most significant environmental impact of off-road motorcycle misuse that is not amendable by modification of the machine (Harrison 1980).

Effects on Wildlife

Research on ATV impacts to wildlife is quite extensive. However, the majority deals with either snowmobiles or the desert environment. Very little research on the western forest environment is available. Bury (1980) states that documentation of ATV impacts on wildlife in western arid lands is scant and research in the California desert indicates ATV activity affects wildlife by:

(1) Direct damage to the soil and vegetation - food and cover.

(2) Noise harassment of animals - territoriality, courtship, breeding.

(3) Direct mortality. Snowmobiles create little effect on a larger animal and mixed moderate effects on medium-sized animals; small animals over wintering in subsnow environments were drastically affected. For example, Dorrance (1975) discovered that light snowmobile traffic displaced deer from areas immediately adjacent to the snowmobile trails but that further traffic had little effect on deer movement. Studies of deer responses to administrative use of snowmobiles in the control area (normally closed to snowmobiling by the public) indicated:

(1) That deer responded to very low intensities of vehicular traffic.

(2) That the response of deer to vehicular traffic changed with time; and (3) That movement of deer increases sharply when snowmobiles were operating...In contrast, deer in the treatment area (where snowmobiles were permitted and tests were conducted) indicated that deer become habituated to snowmobile traffic.

Bury's (1980) article about impacts of snowmobiles on wildlife points out the effects of snowmobiles on small animals using the subnivean layer (space between snow and soil) appear to vary considerably, according to the depth and moisture content of the snow. Concern is expressed that lowering the population of small animals due to snowmobile use may in turn affect such predator species as owls, eagles, hawks, foxes, coyotes, and bobcats. The relationship has yet to be investigated.

West (1980) points out that impacts depend on the previous exposure that wildlife had to noise. There is an impact particularly on wildlife that has not adapted to noise in the area.

Displacement is the most common result of repeated encounters between wild animals and people. (USDA Proceedings Forest Transportation Symposium 1984). Berry (1980) indicates that birds are often most vulnerable to ATV use. Research shows that there were significant differences in abundance and variety of birds

between the high and low ATV use plots. The low use plot had greater abundance and diversity. Within each plot, there were significant differences in variety and abundance of birds when vehicles were present and when they were not. The high use plot had significantly fewer birds and the low use plot had more birds on days when ATV use was heavy in the high use plot. Of the birds studied in depth, most moved away from the area of vehicle use, most flush more readily, and when disturbed most would fly to dense bushes like mesquite.

Information and Education

In an article on user education, Wells (1980) points out that ATV users can be directed to areas or moved from one area to another by providing something positive for them. Suchovsky (1980) states that conservation attitude development should be an integral part of a total educational experience, not just an isolated course. Sanderson (1980) suggests that if ATV users were responsible, properly educated and used accepted vehicles, many of the existing management problems that have preoccupied us for the past several years would be reduced or eliminated.

Opportunities

In their off-vehicle study report, The California Department of Parks and Recreation (1975) states that "as the largest single land holder in California, the Federal Government already controls vast amounts of land - the most important requisite of ATV recreation and, "because of their size, location and history of use, it is clear that the present landholdings of the Forest Service and Bureau of Land Management are the major potential suppliers of large expanses of land for ATV recreation in the tate of California." The report also points out that the topography and vegetation of most of the Forest Service lands tend to limit ATV use to trails and unimproved forest roads (Symmes).

Lands Adm. by the Manti–La Sal National Forest Sept. 30, 1990

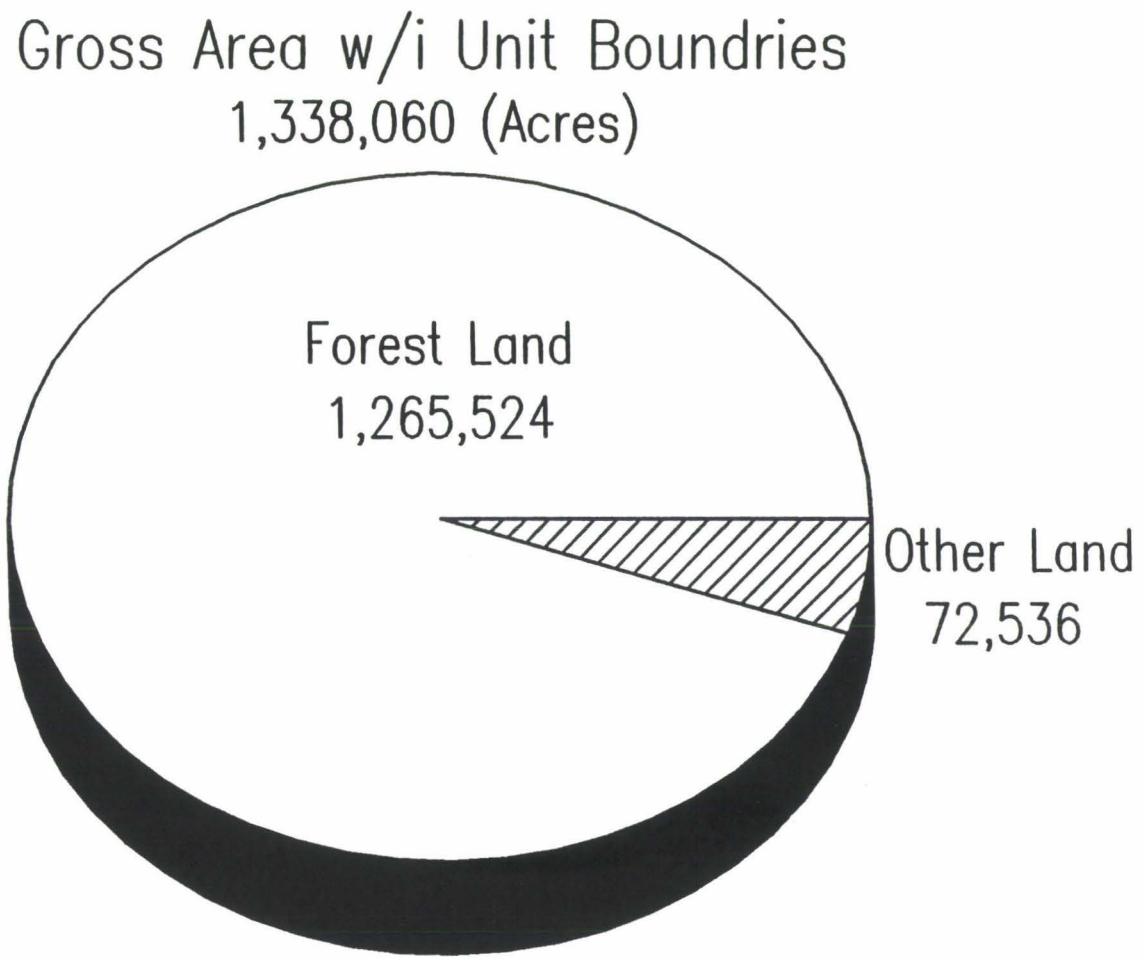


Figure 3

Public Involvement

Public involvement in decison making and educating the public about ATV management, namely design-capacity guidelines, will enable environmentalists, ATV users, and the general public to better understand the management constraints that accompany ATV planning.

Kickbusch (1980) states that public input is a must in ATV planning. Users and the non-users both must understand what is to be accomplished. Total agreement is not necessary, but desirable.

Leonard (1980) suggests that decision making on ATV management include public involvement with task forces composed of land managers, user club managers and researchers. The NEPA (National Environmental Protection Agency) has established rules and policies that public land managers must include the general public in the decision making process regarding management of public lands.

User Attitudes

Many research reports have described the social characteristics of ATV users. Individual ATV users were found to be at least as varied as the machines they use. In spite of this, drivers of all ATV types showed a great tendency to form clubs. It appears that

many or most managerial techniques need to deal with people and their actions, rather than with the impact of ATVs on the environment. For example: Bury and Fillmore (1974) found that most campers regard motorcyclists as self-centered, anti-social, inconsiderate of the rights and feelings of others, highly-motivated, and unintellectual. In comparison, riders saw themselves as socially accepted, highly motivated and considerate of the feelings of others; they rated themselves in the intellectual dimension.

McCool and Roggenbeck (1974) best summarized land use conflicts in comparing land managers with ATV users. The former have traditionally been trained in the natural sciences -- with concepts of sustained yield, multiple use and preservation. ATV use is not compatible with their naturalistic value system. The ATV user, on the other hand, does not have a naturalistic value system and views the ATV as an appropriate means of enjoying the recreational opportunities of public lands.

This disparity in value systems between groups still exists today.

User Conflicts

Conflicts among ATV users and non-users have been identified as one of the most important problems related to ATVs. Kemsley

(1980) states that in the area of land management to minimize conflicts of users, at least one of the answers is the separation of ATV use as much as possible from non-motorized users.

West (1980) suggests that the safety issue is considered the most important conflict between ATV users and non-users. Sometimes there is a need to have both groups in the same corridors, and sometimes on the same trail. If it is going to be in the same corridor, then at least separate the trails. If that cannot be done, then it is important that both groups of users be aware that other users are going to be using the same trail system.

The National ORV Activity Review (USDA 1987) states that the nature of conflicts in ATV/Travel Management are of three major types:

a. Conflicts between ATV users which usually involves the use of different types of vehicles, ie. ATVs and snowmobiles, ATV's and motorcycles.
b. Conflicts between non-motorized users and motorized users, ie hikers vs motorcyclists, snowmobiler snowmobilers vs cross country skiers.
c. Conflicts between motorized users of the National Forests and private land owners, either within or adjacent to the National Forest boundry.

User Preferences

There seems to be a variety of motivations when people engage in the use of ATVs on public land. Tocher (1980) suggests that the most obvious one is to test their own skills against the terrain and finding that they can make the vehicle perform for them.

Off-highway riders usually want legal, legitimate places to ride and would be cooperative in assisting any government agency in developing destination trails that offer endurance with scenic vistas.

Designs of trails and facilities should accommodate the user as much as possible to accomplish the objective of the trail. Challenge is important to the ATV rider but discretion must be used. Proper location of the trails is a high priority along with trail layout and construction. Not enough trails lead to difficult administration.

METHODOLOGY

III. METHODOLOGY

The decision to document the development of the ATV loop trail process, was based on my experience with in-the-field exposure to the development of the Reeder Canyon loop trail, talking with the user and listening to their wants and desires. The desires of ATV users are towards the development of loop trails of various length and degrees of difficulty.

Planning for the development of ATV loop trails segregates into four major levels. Level I: Research in the field to determine the potential for an ATV loop trail system. If a trail system is feasible, level II leads into the approval process. The project is planned, budgeted, and initiated. The public is involved in preliminary scoping. At the conclusion of an environmental analysis, final approval can be received. Level III consists of on-sight identifying, mapping, and layout of loop trails and other facilities. Trailheads are located, the loop trails are identified, and a final trail design is completed for each loop. Level IV starts with the development of a sign plan, a budget is formulated, and a trail description will be written for each trail before the trail is open for use. After the decision of which trail will be constructed, trail construction begins.

All levels as presented interact with each other during the entire process.

Level I: Field Research

Loop Trail Planning

As planning begins for a loop trail system, a review was conducted of the available literature on the subject of ATV's in conjunction with loop trails. The answers to the following questions help assess the suitability of a proposed trail. Although a number of papers suggest a variety of criteria for trail development, these cover a wide range of ideas and offer a maximum of flexibility that may be applied to the development of loop trails and other trails on the Ferron Ranger District.

1. Available Resources - Is the area available or suitable for ATV use? Is the land open or closed to ATV use? If so who is the land owner responsible for management. When this information is learned it can be determined through the land ownership if ATV use is permitted.

2. Usable Resource - Is the resource usable by ATV's? Some environmental considerations should include, a) a variety of terrain, b) soil stability (ATV use on a properly designated trail is no more environmentally degrading then any other use.) c) amount of precipitation and its effect on trails in regard to water handling capabilities and the potential for erosion, e) wildlife needs, other trail users, logging, mining, livestock use, and etc. f) available lakes, scenery, fishing, hunting, and

other opportunities that provide enjoyment and satisfaction to the user.

3. Access - The distance from population centers - studies show that use drops considerably when the population center to the trailhead is beyond 125 miles on primary paved highways. Zero to 25 miles of travel is suggested for secondary roads and 0 to 10 miles on unimproved roads.

4. Parking - Are areas available for vehicle parking? Parking areas need to be designed to handle the users it will serve. Year round or seasonal use may need to be considered.

5. Trail Planning - Size, length, and type of trails need to be determined. Consider travel distance per day and the system concept of what the trails will eventually look like.

6. Support Facilities - What support facilities are needed for ATV's? Thought should be given to needed restrooms, water, picnic shelters, camp sights, and off loading ramps.

7. Funding - How will these projects be funded? Some possibilities include registration fees, state gas tax funds,user tax (levied on sale of equipment), volunteer donations, partnerships, other federal funding.

"ATV users will use the vehicle as a means of transportation to participate in other recreation activities such as camping, picnicking, fishing, photography, sightseeing, riding for pleasure, and many more opportunities." (Nicholes 1980).

Designing of trail systems must include several considerations.

A balance must be maintained between providing a recreation use and protecting the environment. "The challenge centers on the task of providing trail users with a high-quality recreational experience while at the same time minimizing the potential impacts of motorized vehicles in the forest setting." (Roy Janson, AMA Land Use Coordinator)

Another task in trail planning is to identify the users' wants and needs. Joe Wernex writes, "The successful trail must:

1. Satisfy the trailbike enthusiast;
2. provide protection for the environment; and
3. be developed and managed in a cost-effective manner."

Here he places the users' satisfaction as #1.

In planning for loop trails on the Ferron Ranger District, meetings were scheduled with local users and an active ATV Committee on the forest was utilized that were in the process of formulating a new forest travel plan and map. The committee expressed their desires as follows:

1. Where possible, provide a variety of loop routes near campgrounds or trailheads.
2. Provide trails that are less difficult than motorcycle trails.
3. Utilize loop design during development and planning.
4. Provide trails designed for use by a variety of vehicles or other users in different seasons i.e., motorcycles, mountain bikes, ATV's, 4-wheel drive vehicles and snowmobiles.
5. The committee expressed their desire to be involved during the planning stages rather than after the trails were completed.
6. Committee members would be willing to help construct and provide maintenance on trails.

An on-the-ground evaluation of proposed loop trails was the next step in this planning process. For this step the following items should be considered:

1. Gather information from users who have first-hand knowledge of the vicinity and the present trail and road systems.

2. Use topographic maps and aerial photographs to help identify existing roads, trails and other features. USGS topographic maps can be used to plot existing roads, trails, proposed connector trails and any other potential needs such as trailheads, bridges, cattleguards, and signs. The map will need to be revised as trails are added or modified. Overlays can be used on the master map to identify additional alternatives.

3. At the site consider the following:

   a) Review the trail opportunities of the area to identify those that will provide the best recreation experience i.e., scenic vistas, waterfalls, natural land formations, lakes, meadows, historical sites, etc.

   b) Evaluate soil types and stability in relation to potential vehicle use.

   c) Identify sensitive areas that may be adversely affected. Examples might be: wildlife winter range and calving areas, corridors, existing man-made structures, etc.

   d) Determine what the potential conflicts might be with existing uses and users.

The proposed trails are located within 45 minutes to 2 1/2 hours, travel distance from local communities and major population centers such as Provo, Salt Lake City, and Ogden. The Ferron Ranger District is located in central Utah on Highway 10 approximately 30 miles south of Price, headquarters of the Manti-La Sal National Forest.

There are many small lakes and ponds scattered throughout the area. The district is comprised of approximately 350,000 acres. Elevations vary from 7,000 feet near Joes Valley Reservoir to 10,500 feet on a section of the scenic Skyline Drive. Traveling at higher elevations in the area it is possible to view the La Sal, Blue, and Henry Mountains located approximately 100 miles to the Southeast. Streams, meadows and local mountain peaks dominate the landscape over the entire ranger district.

Vegetation is primarily Spruce, Sub-Alpine Fir, and Aspen. Other species such as Douglas Fir, Ponderosa Pine and Pinyon/Juniper stands can be found at lower elevations. The variety of scenery and diversity seems endless.

Remnants of slab piles and old abandoned coal mines are of interest to the user. During the summer months, it is possible to observe deer, elk, bobcats, mountain lions, and occasionally bear. Driving for pleasure, fishing, hunting, and wood gathering are the more popular uses on the district.

With the developement of loop trails it will be possible to link the entire district together with a large network of usable trails of various length. Some loops could extend up to 100 miles in length with sections crossing the Great Western Trail. There would be very little backtracking. Other loops could be as short as 15 miles. All loops would consist of newly developed trails assisted by present forest system roads which would provide a variety of difficulty to the user of all ages.

The required approval needed for the loop trails will be completed when funding for the trails has been allocated and the Environmental Assessment for the Forest Travel Plan has been completed and approved. Not all portions of the trails need maintenance; several trails need only to be linked together on a map and made available to the public.

On-the-ground studies show that the district can provide adequate trails for ATV use. In a meeting with our local ATV committee, we identified potential loop trails, adjacent landowners, special use permittees and livestock permittees. These loop trails would have little or no effect on these users.

Our Interdisciplinary Team members, for the Environmental Assessment, will consist of specialists who provide technical resource data and respond to all technical aspects of the project. Issues will need to be discussed and listed if they cannot be mitigated. The Environmental Assessment date for completion is planned for early spring of 1991. Scoping for public input will be completed prior to the approval of the EA.

Letter of Implementation

A general letter of information that includes proposed improvement costs will be written and submitted to the Forest Supervisor. This document will allow the supervisor and staff to become aware of district monetary needs and an overview of the proposed loop trails project. The overview should include:

A) Location of trails to avoid user conflict with campgrounds.
B) Reconstruction of deteriorated or inadequate sections of trail (safety).
C) Construction of key sections of new trail to create loop trails.
D) Installations of trailheads, bridges and cattleguards where needed.
E) Posting of directional and regulatory signs.
F) Posting of private property within the forest boundary.

A project work plan will be developed for each trail to help determine the cost for each loop. It will be necessary to prioritize each trail as to importance and benefit to the user. This can be done because on-the-ground contacts has shown where the demand for use is currently at. As dollars become available or as volunteers and partnership are developed, these trails can be completed.

Level III - Design and Mapping of Loop Trails

The objective for loop trails is to provide trails of various lengths and difficulties for a variety of individuals and families for their recreational enjoyment. The following area maps show the loop trails and their relation to known landmarks such as communities and campgrounds.

A map and short description will be given on each trail which will include the following information.

1. Location
2. Length
3. Recommended trail specifications
4. Trail names and numbers (numbers will be assigned at a later date by engineering)
5. Elevation from trailhead to highest point on trail
6. Problems needing correction
7. Scenic features
8. Sensitive areas
9. Dispersed camping potential

Final approval for route locations (including state and county roads) will be determined in the environmental assessment. Many

items listed above have already been evaluated on the ground during the previous field season.

All trails will be designed for two-way traffic. A single direction trail would lead riders to adopt a false sense of security in their riding habits by not expecting anyone to be approaching from the opposite direction. Two-way traffic is the norm in most current means of transportation.

Experienceindicates that it is better to educate users to understand that at any time they may be confronted by an oncoming users vehicle,or wildlife, and that vehicles should be operated at a proper speed which will allow ample reaction time to any oncoming traffic.

A comparision table for each proposed trail showing recreation opportunities can be seen in figure four.

Ferron Ranger District

Map Key Number	Loop Trail Name	Loop Trail Total Miles	Forest Road Miles	Forest Trail Miles *	Elevation Rng Feet	Recreation Opportunities **							
						Camp Dev.	Camp Disp	Fish Resv	Fish Stream	Hik-ing	Photo-graphy	Uniq Scen	Wild View
1	Spoon Creek	10.0	6.0	4.0	8,900- 9,200	5	2	0	2	3	3	3	3
2	Spoon Creek/Lowry Water	20.0	16.0	4.0	7,300- 9,200	5	3	0	4	3	4	3	4
3	Spoon Creek/Skyline Drive	39.0	25.5	13.5	8,900-10,800	5	5	3	2	4	4	4	4
4	Reeder Canyon/Skyline Drive	31.0	21.5	9.5	7,200-10,800	0	5	3	3	4	5	4	4
5	Reeder Canyon/Blue Lake	29.5	11.0	18.5	7,200-10,800	0	4	1	2	4	4	4	4
6	Reeder Canyon/Littles Creek	21.0	10.5	10.5	7,200-10,200	0	4	0	2	3	3	3	3
7	Joes Valley/North Dragon	14.0	14.0	0	7,200- 8,800	5	2	5	1	1	1	2	2
8	North Dragon/Cap	29.0	29.0	0	7,200- 8,900	5	2	5	1	1	2	5	2
9	Ferron Res./Georges Fork	16.0	11.0	5.0	9,500-10,900	5	3	5	2	3	5	4	3
10	Ferron Res./Skyline Drive	23.0	23.0	0	9,500-10,500	5	3	4	2	3	5	4	4
11	Ferron Res./Ferron Mayfield	31.0	31.0	0	9,500-10,500	5	4	4	1	3	5	4	4
12	Ferron Res./Hunters Highway	27.0	27.0	0	9,500-10,500	5	4	4	1	3	4	3	4
13	Wrigley Springs Reservoir	12.0	12.0	0	8,900- 9,200	0	2	3	0	2	2	2	2
14	Wrigley Springs/Muddy	28.0	28.0	0	8,900-10,500	5	3	4	0	3	4	4	4

* Forest Trails limited to vehicles 40" or less in width.

** The higher the number (0-5) the greater the recreational opportunity potential.

Figure 4

GENERAL DESCRIPTION OF LOOP TRAILS

GENERAL DESCRIPTION OF PROPOSED LOOP TRAILS

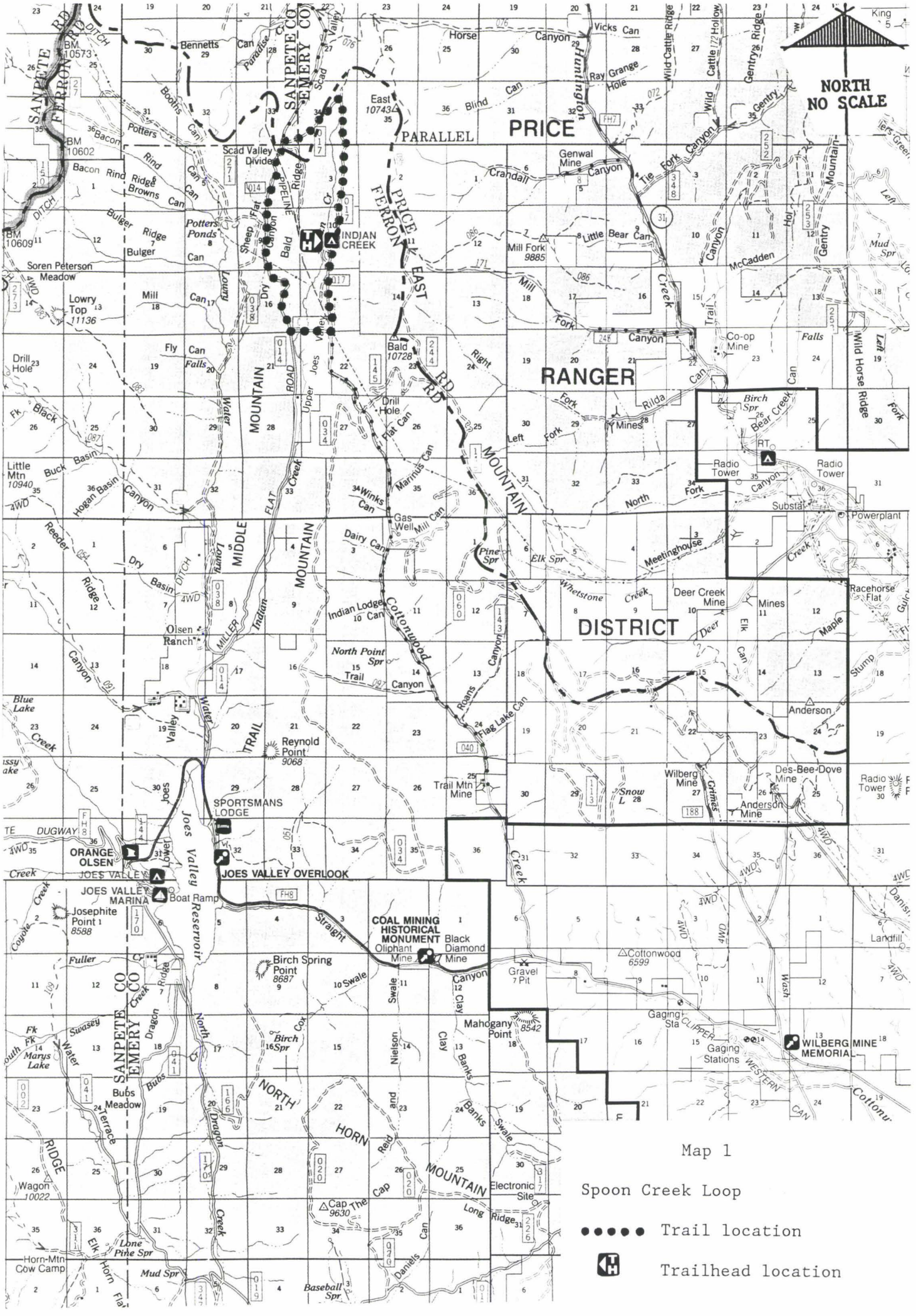
Spoon Creek Loop Trail: Map 1

This trail is a loop of approximately 8 miles in length which consists of a network of forest system roads. The first 5 miles is located on the Spoon Creek Road (FR #017), an unimproved dirt road. During wet periods, this road becomes a challenge to those who use it. The grade varies from 2 - 10%.

The trail leaves the Spoon Creek Road (FR#017) and intersects with Miller Flat Road (FR #014), a graveled surface road. From here the trail goes south for approximately 3 miles where it junctions with the Cottonwood Creek Road (FR #040), a native surface road. It then continues back to the Indian Creek Campground where the trailhead will be established.

Drainage is adequate on this trail and existing road locations will not need to be modified or changed.

This trail takes the user through mixed conifer and aspen stands, open meadows and ridges where many scenic vistas are available for viewing and photo taking. Many deer frequent this area and it is possible to view these wild animals. Elevation ranges from 8,900 to 9,200 feet.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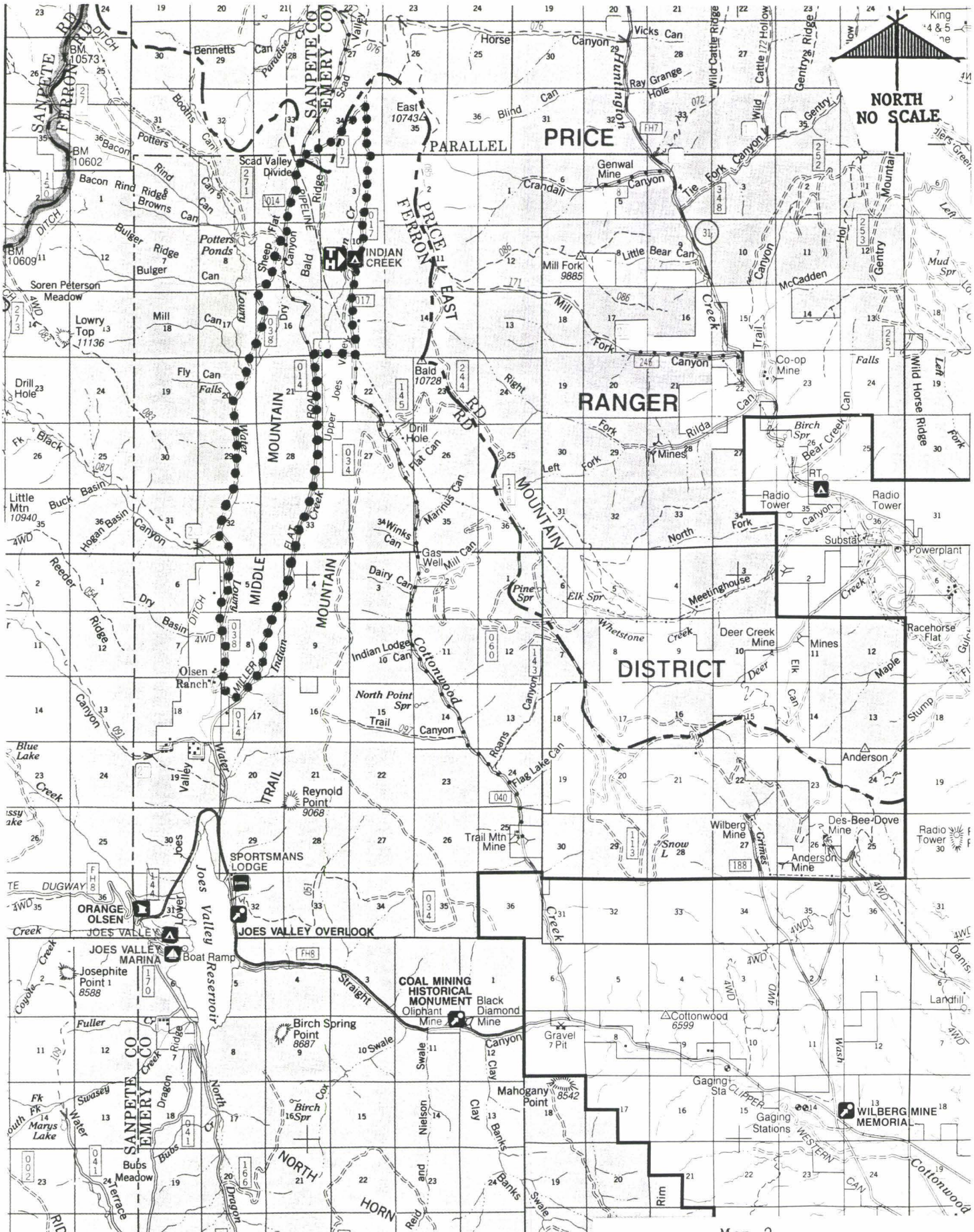
INDIAN CREEK
SPORTSMANS LODGE
ORANGE OLSEN
JOES VALLEY OVERLOOK
JOES VALLEY MARINA
Boat Ramp
COAL MINING HISTORICAL MONUMENT
Oliphant Mine
Black Diamond Mine
WILBERG MINE MEMORIAL
Gaging Sta
Gaging Stations
Co-op Mine
Trail Mtn Mine
Anderson Mine
Wilberg Mine
Des-Bee-Dove Mine
Deer Creek Mine
Radio Tower
Powerplant
Substa
Olsen Ranch
Horn-Mtn Cow Camp
Scad Valley Divide
Soren Peterson Meadow
Bubs Meadow
Joes Valley Reservoir
Flag Lake Can
Cottonwood
Mahogany Point
Reynold Point
Josephite Point
Birch Spring Point
Lowry Top
Little Mtn
Wagon
Cap The
Bald
East
Mill Fork
Genwal Mine
Gravel Pit
Landfill
Map 1
Spoon Creek Loop
Trail location
Trailhead location

Spoon Creek/Lowry Water Loop Trail: Map 2

This loop trail is approximately 20 miles long and consists of several Forest System Roads. The trail starts on the Spoon Creek Road (FR #017) adjacent to Indian Creek Campground. It turns northwest onto a native surface (dirt) road for approximately 5 miles to the Millers Flat Road (FR #014), a gravel surface road. The trail continues south on this road for 1.5 miles to the Lowry Water Road (FR #038), a native surface road. From here the trail winds south for 7.5 miles following Lowry Water Creek where it is possible to stop and catch trout for lunch along the way. It then turns north on the lower portion of the Millers Flat Road (FR #014) for approximately 5.5 miles to the junction of Cottonwood Creek Road (FR #040). The return trip to the trailhead and campground is on the Spoon Creek Road (FR #017).

This trail offers a variety of scenery for the user as it winds by open meadows, conifer and aspen stands, streams and many open areas where spectacular viewing abounds. Depending on the time of day, it is possible to see deer and elk along the way. Elevations range from 7,300 to 8,900 feet.

Drainage is adequate on this loop trail and existing trail locations will not need to be changed or modified.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WILBERG MINE MEMORIAL
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FLAT MOUNTAIN
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TRAIL MOUNTAIN
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Cottonwood 6599
Mahogany Point 8542
Birch Spring Point 8687
Josephite Point 8588
Cap The 9630
Wagon 10022
Lowry Top 11136
Little Mtn 10940
Olsen Ranch
Soren Peterson Meadow
Bubs Meadow
Horn-Mtn Cow Camp
Genwal Mine
Co-op Mine
Trail Mtn Mine
Oliphant Mine
Black Diamond Mine
Deer Creek Mine
Wilberg Mine
Des-Bee-Dove Mine
Anderson Mine
Gaging Sta
Gaging Stations
Electronic Site
Radio Tower
Substa
Powerplant
Landfill
Gravel Pit
Mill Fork 9885
Anderson
Racehorse Flat
Map 2
Spoon Creek/Lowry Water Loop
Trail location
Trailhead location

Spoon Creek/Skyline Drive Loop Trail: Map 3

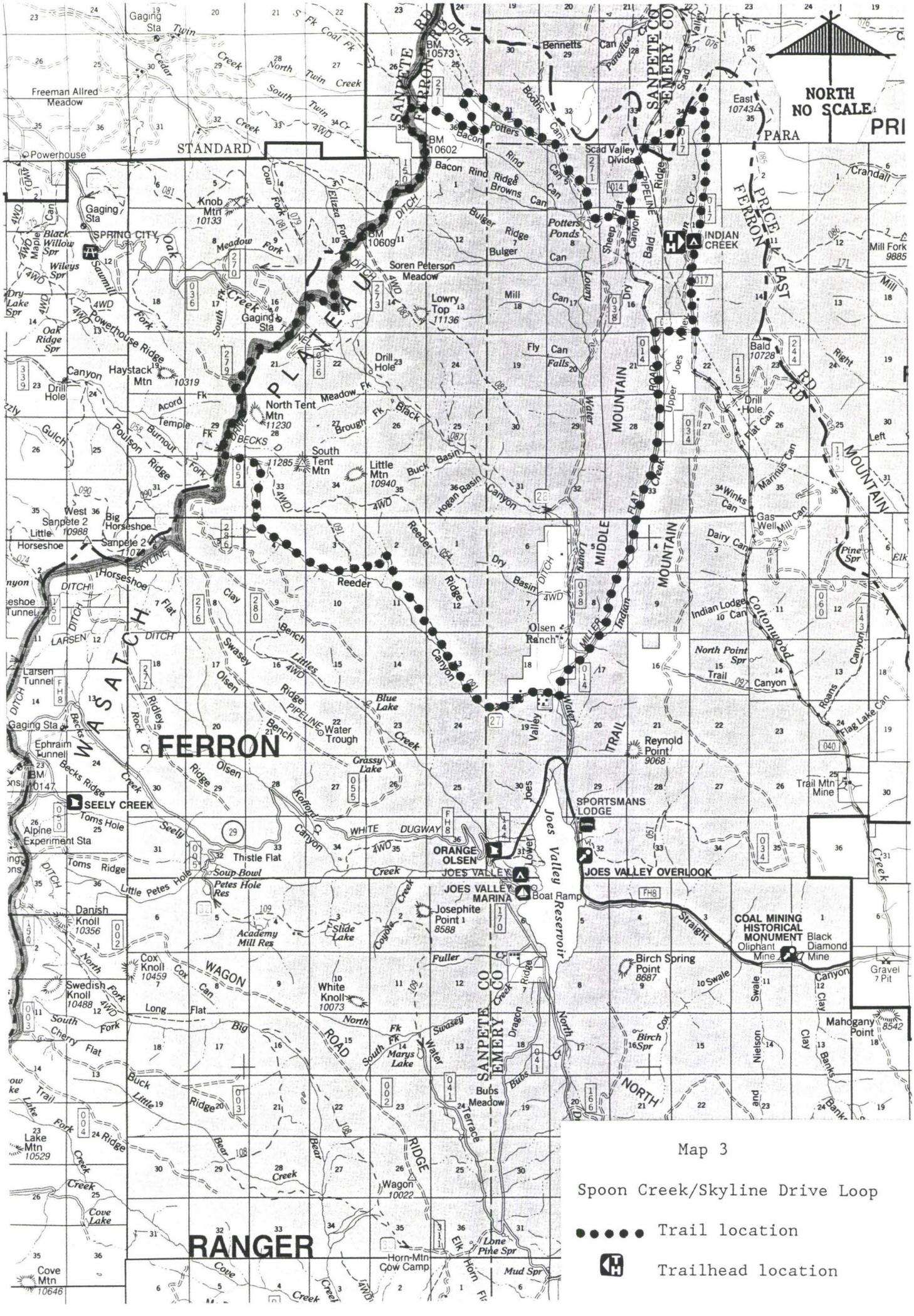
This loop trail, consisting of approximately 39 miles, offers the user a breathtaking experience as it starts at an elevation of 8,900 at the Indian Creek Campground and extends to 10,800 feet along a portion of the scenic Skyline Drive.

The first 5 miles of this trail is along the Spoon Creek Road (FR #017), a native surface road, to its junction with Millers Flat Road (FR #014). Here the trail turns south for 1.5 miles to the junction of Potters Canyon Road (FR #271), a high clearance vehicle road. After traveling for 5.5 miles in a steady westernly climb, the trail meets up with the scenic Skyline Drive (FR #150). For 7 miles one is able to view both the east and west side of this mountain range. On a clear day it is possible to see 100 miles in any direction. The trail turns East on FR #054 for one mile where it turns abruptly onto the Reeder Canyon Trail (091) which is a trail restricted from vehicles over 4 feet in width. This portion of the trail is most difficult with sharp turns, hills and unknown trail surface for 9.5 miles. The trail continues onto the Millers Flat Road (FR #014) north to the trail head at the Indian Creek Campground.

Some points of interest along this trail are Potters Ponds where it is possible to take a break and fish for the Rainbow and Cutthroat trout in two reservoirs. Skyline Drive offers a variety of scenic vistas at high elevations. The trail travels

along streams, meadows, small reservoirs and through many open meadows where one can view for many miles in any direction. There are many dispersed camping, or picnic, areas along the way where it is possible to relax and find time for solitude.

Drainage is adequate along the Forest System Roads portion of the trail, but it will be necessary to upgrade portions of the Reeder Canyon Trail (091), even though this portion of the trail was opened in the Fall of 1990.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JOES VALLEY MARINA
JOES VALLEY OVERLOOK
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COAL MINING HISTORICAL MONUMENT
Joes Valley Reservoir
Boat Ramp
Olsen Ranch
Freeman Allred Meadow
Soren Peterson Meadow
Powerhouse
Gaging Sta
Knob Mtn 10133
Haystack Mtn 10319
North Tent Mtn 11230
South Tent Mtn 11285
Little Mtn 10940
Lowry Top 11136
Bald 10728
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Josephite Point 8588
Birch Spring Point 8687
Swedish Knoll 10488
Danish Knoll 10356
Cox Knoll 10459
White Knoll 10073
Lake Mtn 10529
Cove Mtn 10646
Wagon 10022
Mahogany Point 8542
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Black Diamond Mine
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Alpine Experiment Sta
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Big Horseshoe
Little Horseshoe
Horseshoe Tunnel
Thistle Flat
Soup Bowl
Petes Hole Res
Academy Mill Res
Slide Lake
Grassy Lake
Blue Lake
Marys Lake
Lone Pine Spr
Mud Spr
Horn Mtn Cow Camp
Map 3
Spoon Creek/Skyline Drive Loop
Trail location
Trailhead location

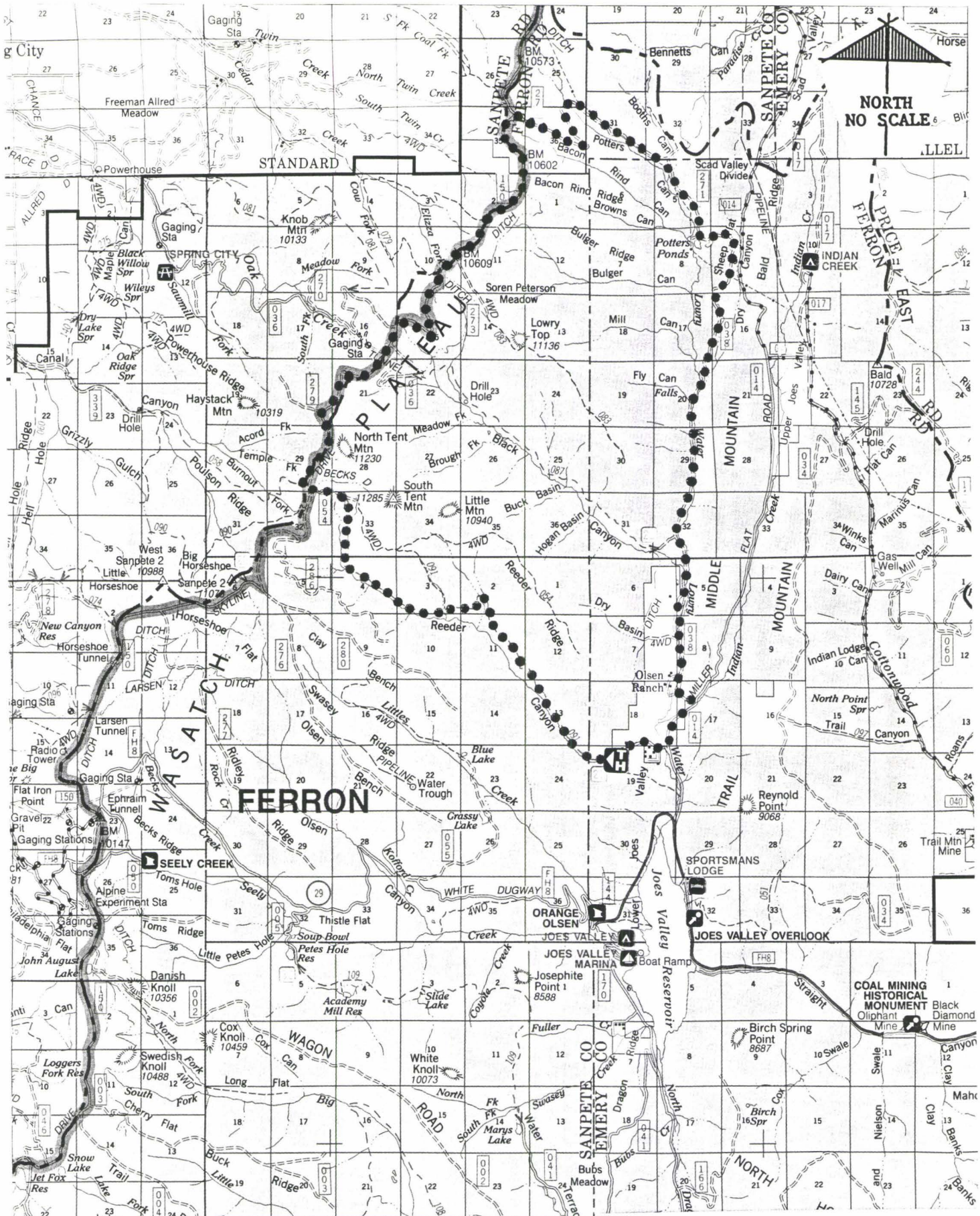
REEDER CANYON TRAILHEAD

Reeder Canyon/Skyline Drive Trail Loop: Map 4

The Reeder Canyon/Skyline Drive loop trail consists of approximately 31 miles. Nine and one half miles of the route is on Reeder canyon trail #091. It is restricted to vehicles under 40 inches in width. The remaining 21.5 miles is a network of Forest System Roads. Elevations range from 7,300 feet at the Reeder Canyon trailhead to 10,800 feet on Skyline Drive.

The trail begins at a trailhead located on a sagebrush grass flat at the mouth of Reeder Canyon. It crosses through Reeder Creek and winds its way 9.5 miles through open meadows, aspen and conifer timber stands to Skyline Drive (FR #150). The trail turns north on Skyline Drive for approximately 7 miles. While on Skyline Drive, it is possible to view communities in the valley on both sides of the Manti mountain range. The user can look down onto the San Rafael Swell and desert or on a clear day gaze at the La Sal, Henry, or Blue Mountains at a distance of 100 miles. The trail intersects at Potters Canyon with FR #271. This segment of trail passes by Potters Ponds where it is possible to stop, relax, or even fish for Brook and Rainbow trout. There are many dispersed camping areas along the way. After relaxing for awhile, the user can travel along the Lowry Water Road (FR #038) for 9 miles along Lowry Water, a small clear stream alive with pan size trout. The trail meets up with Millers Flat Road (FR #014) and after 2 miles of travel is back

to the starting point. This trail offers a variety of scenery and places for solitude and relaxation.



Map 4

Reeder Canyon/Skyline Drive Loop

●●●●● Trail location

Trailhead location

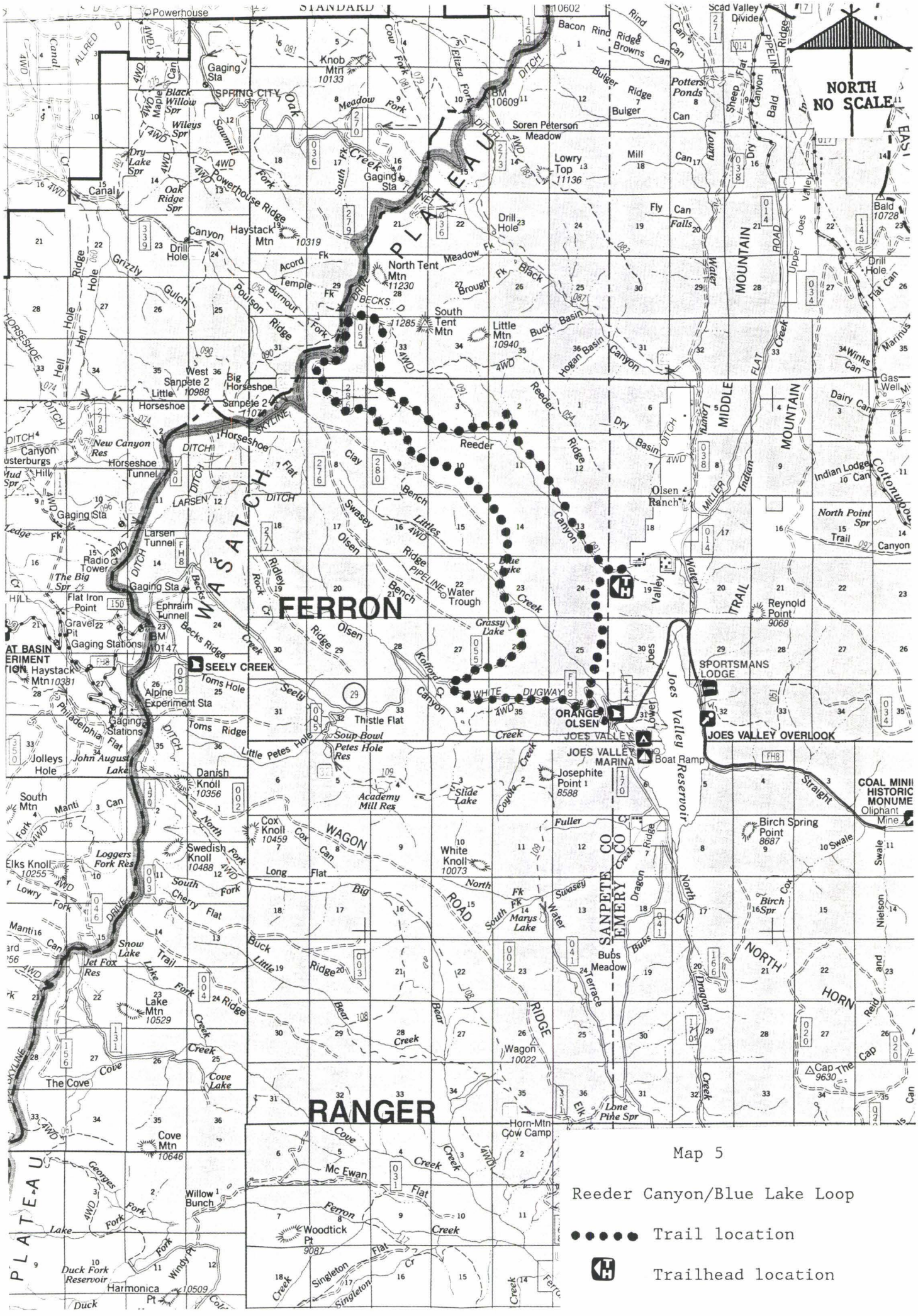
Reeder Canyon/Blue Lake Trail Loop: Map 5

Most of this loop trail consists of trails restricted to vehicles under 40 inches in width or on low standard forest system native material (dirt) roads. Elevation ranges from 7,200 feet to 10,800 feet.

After traveling through Reeder Canyon, the trail intersects with FR #150 and turns south for one mile on Skyline Drive. Here the trail joins with a low standard dirt road used for timber harvest activities. The old road winds down the canyon for 3 miles where it tapers into a narrow trail restricted to vehicles under 40 inches in width. From this point the trail proceeds through meadows and aspen and conifer timber stands. Remnants of an old saw mill can be seen as the trail passes by an old sawdust and slab pile on route to Blue and Grassy Lakes. The trail empties onto the Grassy Lake Road (FR #055) and after 3 miles connects onto the Orangeville Ephraim Road (FH #8). This segment of the trail is a road belonging to Sanpete and Emery Counties. It will be necessary to get their approval before this entire route can be used. The final segment of this trail is adjacent to the Orange Olsen Guard Station through Littles Creek and approximately 3 miles back to the trailhead.

This loop trail offers many dispersed camping sites. Fishing for pan sized trout can be found in both Blue and Grassy Lake. This trail is more challenging than those previously discussed.

The lower two miles of this trail is operational but needs some reconstruction work to make it more safe for travel. Minimal work is needed and could be done through volunteers and partnership agreements.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Boat Ramp
Joes Valley Reservoir
WASATCH PLATEAU
SANPETE CO
EMERY CO
MIDDLE MOUNTAIN
WAGON ROAD
NORTH HORN
Reeder Canyon
Blue Lake
Grassy Lake
Soup Bowl
Petes Hole Res
Academy Mill Res
Loggers Fork Res
Jet Fox Res
Duck Fork Reservoir
Marys Lake
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Lowry Top 11136
Haystack Mtn 10319
North Tent Mtn 11230
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Olsen Ranch
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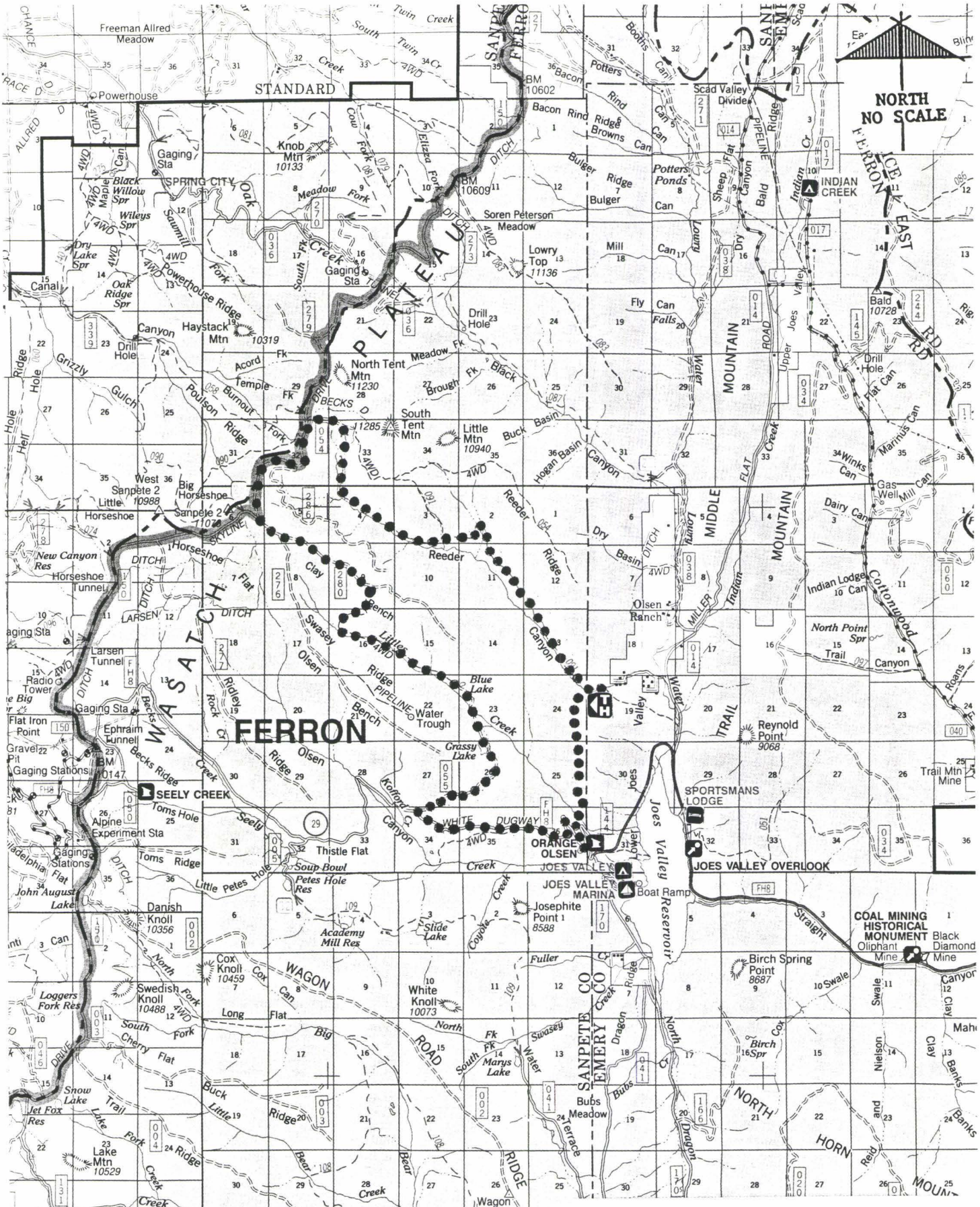
Horseshoe Tunnel
Flat Iron Point
Gravel Pit
Radio Tower
Toms Hole
Toms Ridge
Little Petes Hole
Jolleys Hole
Cove Lake
Bubs Meadow
Birch Spring Point 8687
Lone Pine Spr
Horn-Mtn Cow Camp
Woodtick Pt 9087
Harmonica Pt 10509
Willow Bunch
Mc Ewan Flat
Singleton Creek
Map 5
Reeder Canyon/Blue Lake Loop
Trail location
Trailhead location

Reeder Canyon/Littles Creek Trail Loop: Map 6

The Reeder Canyon/Littles Creek loop is approximately 21 miles in length. It begins at a trailhead located in a sagebrush, grass flat on the Reeder Canyon Trail #091. It crosses through Reeder Creek and winds its way 9.5 miles through open meadows, aspen and conifer timber stands to Skyline Drive (FR #150). On Skyline Drive the route continues south for one mile to junction with (FR #280). The trail continues for two miles to FR #055 then on to FH 8, the Orangeville Ephriam road which is under jurisdiction of Emery and Sanpete counties. It will be necessary to get their approval before this trail segment can be used. The final 3 mile stretch of trail takes the user around the Orange Olsen Guard Station back to the starting point. Elevation ranges from the trailhead at 7,300 to 10,200 feet on Skyline Drive. No additional maintenance needs to be done to make this loop usable. Most of the system is made up of native material (dirt) roads. The route provides a variety of outstanding scenery and a good possibility for sighting deer and elk during the evening and early morning hours.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Academy Mill Res
Josephite Point 8588
Slide Lake
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White Knoll 10073
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Jet Fox Res
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Wagon 10022
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Mc Ewan
Willow Bunch
Bubs Meadow
Marys Lake
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Potters Ponds
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Bald Ridge
Indian Creek
Joes Valley Reservoir
Trail Mtn Mine
Cottonwood Canyon
Indian Lodge
Olsen Ranch
Grassy Lake
Blue Lake
Water Trough
Gas Well
Dairy Can
Flat Can
Marinus Can
Winks Can
Mill Can
Bacon Rind Ridge
Browns Can
Potters Can
Bulger Ridge
Mill Can
Fly Can
Falls
Drill Hole
Reeder Ridge
Reeder Canyon
Clay Bench
Swasey Olsen Ridge
Becks Ridge
Ridley Rock Cr
Toms Hole
Toms Ridge
Little Petes Hole
Danish Knoll
Long Flat
South Fork Cherry Flat
Buck Little Ridge
Bear Creek
Cove Lake
Cove Creek
Georges Fork
Ferron Flat
Woodtick
Mc Ewan
Willow Bunch
Horn Mtn
Reid and Banks
Nielson
Birch Spr
Straight Canyon
Swale
Clay Banks
Maho
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Water Valley
Joes Valley
Middle Mountain
Mountain Road
Upper Joes Valley
Lower Joes Valley
Fuller Ridge
Dragon Cr
Terrace
Bubs
Cox Can
Wagon Can
Long Flat
Big Flat
Fuller
Dragon
North Fork
South Fork
Meadow Fk
Brough Fk
Acord Temple Fk
Burnout Fk
Poulson Ridge
Grizzly Gulch
Hell Hole Ridge
Oak Ridge Spr
Powerhouse Ridge
Dry Lake Spr
Black Willow Spr
Wileys Spr
Sawmill Fork
Oak Creek
Cow Fork
Eliza Fork
Twin Creek
South Twin Cr
Hogan Basin
Buck Basin
Canyon
Flat Creek
Middle Mountain
Indian Trail
Water Valley

JOES VALLEY RESERVOIR TRAILHEAD

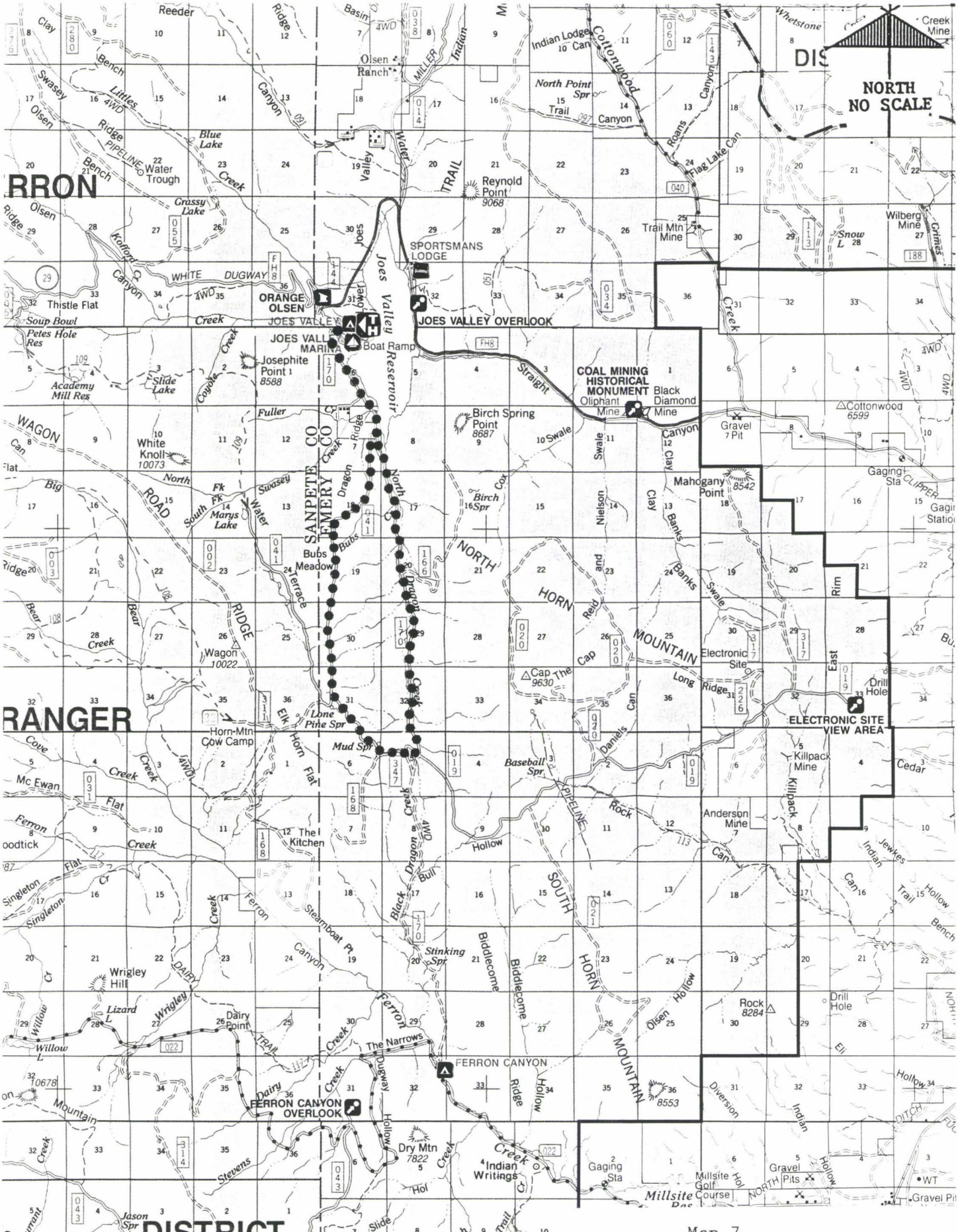
Joes Valley/North Dragon Loop Trail: Map 7

The starting point for this trail is located approximately one mile south of Joes Valley campground (a 46 unit developed campground).

This route heads south, adjacent to the reservoir, on FR #170 for approximately 6 miles to the junction of FR #041. At this point the trail climbs from 7,200 feet to 8,800 feet. At this elevation it is possible to overlook Joes Valley Reservoir and the valley floor adjacent to it. The view into the valley is magnificent with the dark blue/green color of the reservoir reflecting in the sunlight. The trail is in mostly open terrain mingled with scattered Ponderosa Pine and Pinyon/Juniper trees. This route has no vehicle restrictions but is not heavily used except during the big game hunting season.

After traveling along FR #041 for 6 miles, the trail again intersects with FR #170 and returns back to the starting point.

From this trailhead it is possible to travel by ATV to the trailhead in Reeder Canyon 3 miles to the north. These trails then become available to those who are camping in Joe's Valley Campground and want to participate in this activity.



Map 7

Joes Valley/North Dragon Loop

●●●●● Trail location

Trailhead location

This trailhead is located approximately one mile south of Joes Valley Campground on FR #170. The trail continues for 6 miles on a good condition native surface road, to its junction with FR 019. This road is also a native surface road that is problem free until it rains; these roads then become extremely slick. The route continues to the junction of FR #020, a generally rutted dirt road, which circles around the CAP (a large limestone mountain) for 7 miles and again meets up with FR #019 and returns back to the trailhead.

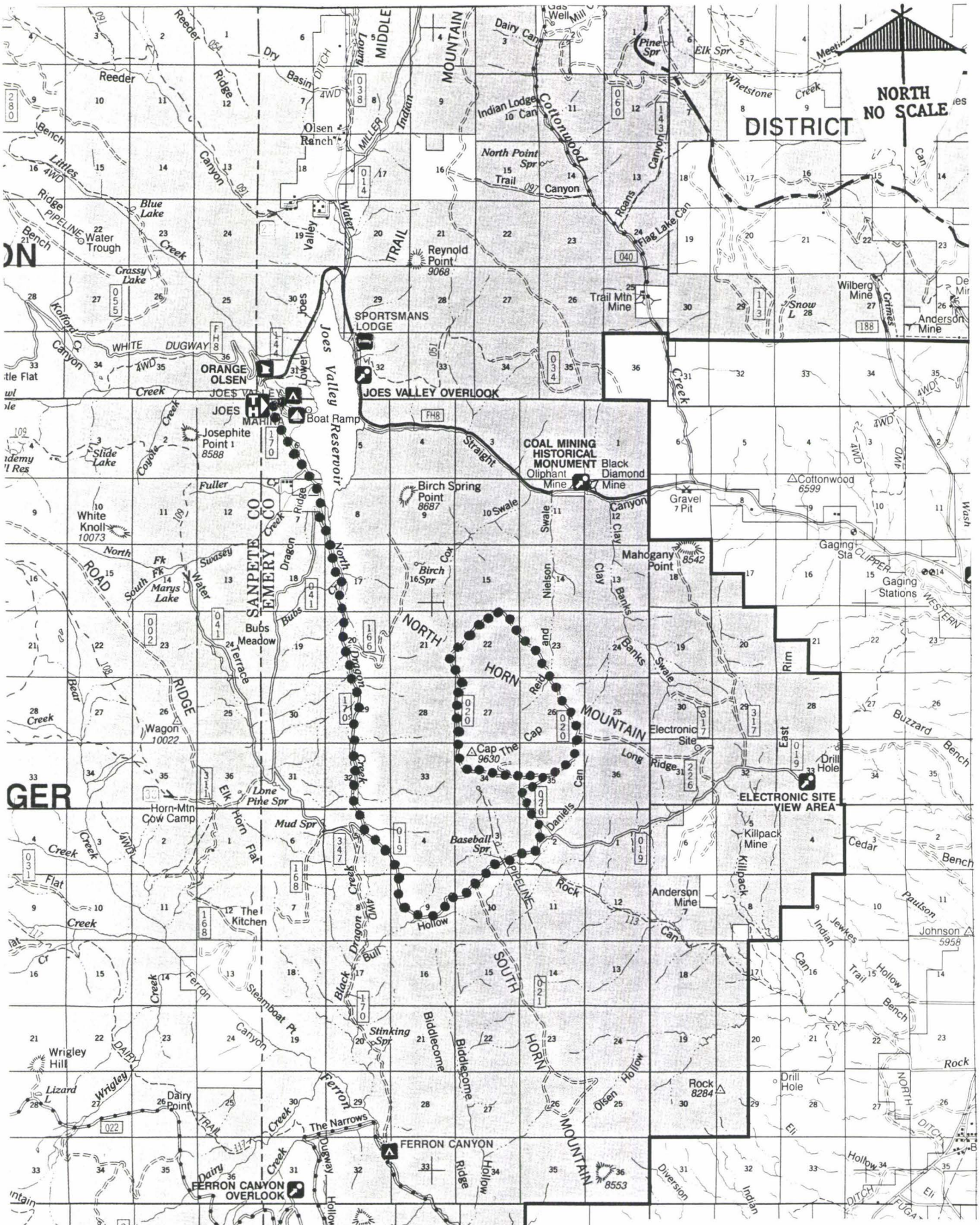
This loop has two side trails along with the loop. For Side Trail A: instead of taking FR #020, stay on 019 for approximately 4 miles to the electronic site view area. From this view area the valley floor drops abruptly 1800 feet from where you are standing. Here it is possible to view Castle Valley and some of the communities below. On a clear day it is possible to see the surrounding mountain peaks 100 miles to the southeast. For Side Trail B: continue on FR #019 for about 2.5 miles instead of turning at the FR #020 junction. Turn north on FR #226. This road will junction with FR #020 where it is possible to loop around the CAP or return back on FR #020 and backtrack to the trailhead.

The area around the CAP has an interesting history. Dinosaur bones, egg shell fragments, shark teeth and arrow heads have

been found by different universities permitted to do this type of collecting on the district. Some of these items collected have been given to local museums for display.

These ATV trail routes are all located on native material (dirt) forest system roads. Vehicle travel is light and no additional construction or reconstruction is needed. Elevation ranges from 7,200 feet to 8,900 feet.

Trailhead facilities will need to be developed for this loop. From this trailhead it will be possible to travel by ATV to the trailhead in Reeder Canyon 3 miles to the North. These trails then become available to those who are camping in Joes Valley campground and want to participate in this activity.


NORTH DISTRICT
NO SCALE
SANPETE CO
EMERY CO
NORTH HORN MOUNTAIN
SOUTH HORN MOUNTAIN
JOES VALLEY OVERLOOK
FERRON CANYON OVERLOOK
FERRON CANYON
SPORTSMANS LODGE
ORANGE OLSEN
COAL MINING HISTORICAL MONUMENT
ELECTRONIC SITE VIEW AREA
DISTRICT
Joes Valley Reservoir
Cap The 9630
Reynold Point 9068
Josephite Point 8588
Birch Spring Point 8687
Mahogany Point 8542
Cottonwood 6599
Rock 8284
Dry Mtn 7822
Little Nelson Mtn 8590
Wagon 10022
White Knoll 10073
Marys Lake
Bubs Meadow
Lone Pine Spr
Horn Mtn Cow Camp
The Kitchen
Dairy Point
Wrigley Hill
Indian Writings
Gaging Sta
Gaging Stations
Oliphant Mine
Black Diamond Mine
Trail Mtn Mine
Anderson Mine
Killpack Mine
Wilberg Mine
Olsen Ranch
Gravel Pit
Drill Hole
Electronic Site
Boat Ramp
The Narrows
Stinking Spr
Baseball Spr
Mud Spr
Birch Spr
Wrigley Spr
Wrigley Sprs Res
Jason Spr
Pine Spr
Elk Spr
North Point Spr
Water Trough
Grassy Lake
Blue Lake
Slide Lake
Flag Lake
Snow L
Johnson 5958
Rock
Cedar Bench
Paulson Bench
Buzzard Bench
Rim
Trail
Canyon
Creek
Ridge
Hollow
Flat
Basin
Bench
Pipeline
Ditch
Diversion
Fuga
Eli
Indian
Jewkes
Roans
Cottonwood
Whetstone
Meetinghouse
Dairy Can
Indian Lodge Can
Flag Lake Can
Daniels Can
Long Ridge
Straight Canyon
Swale
Clay Banks Swale
Red Cap
Cox
Nielson
Fuller
Coyote
Slide
Terrace
Bear
Swasey
North Fk
South Fk
Water
Valley
Lower
Middle
Dry
Reeder
Littles
Miller
Indian
Dragon
Bubs
Joes
Korford
White
Dugway
Elk Horn Flat
Black Dragon
Bull
Stevens
Jason
Slide
Birch
Blue
Wash
Crimes
Anderson Mine
Gaging Sta
Clipper Western
Ferron
Steamboat Pt
Biddlecome
Olsen
Hollow
Rock
Drill Hole
Diversion
Indian
Ditch
Fuga
Eli
Johnson
Cedar
Killpack
Jewkes
Trail
Hollow
Bench
Rock
Ditch
Eli
Fuga
Diversion
Indian
Ditch
Eli
Fuga
Diversion
Indian
Ditch
Eli
Fuga
Diversion
Indian

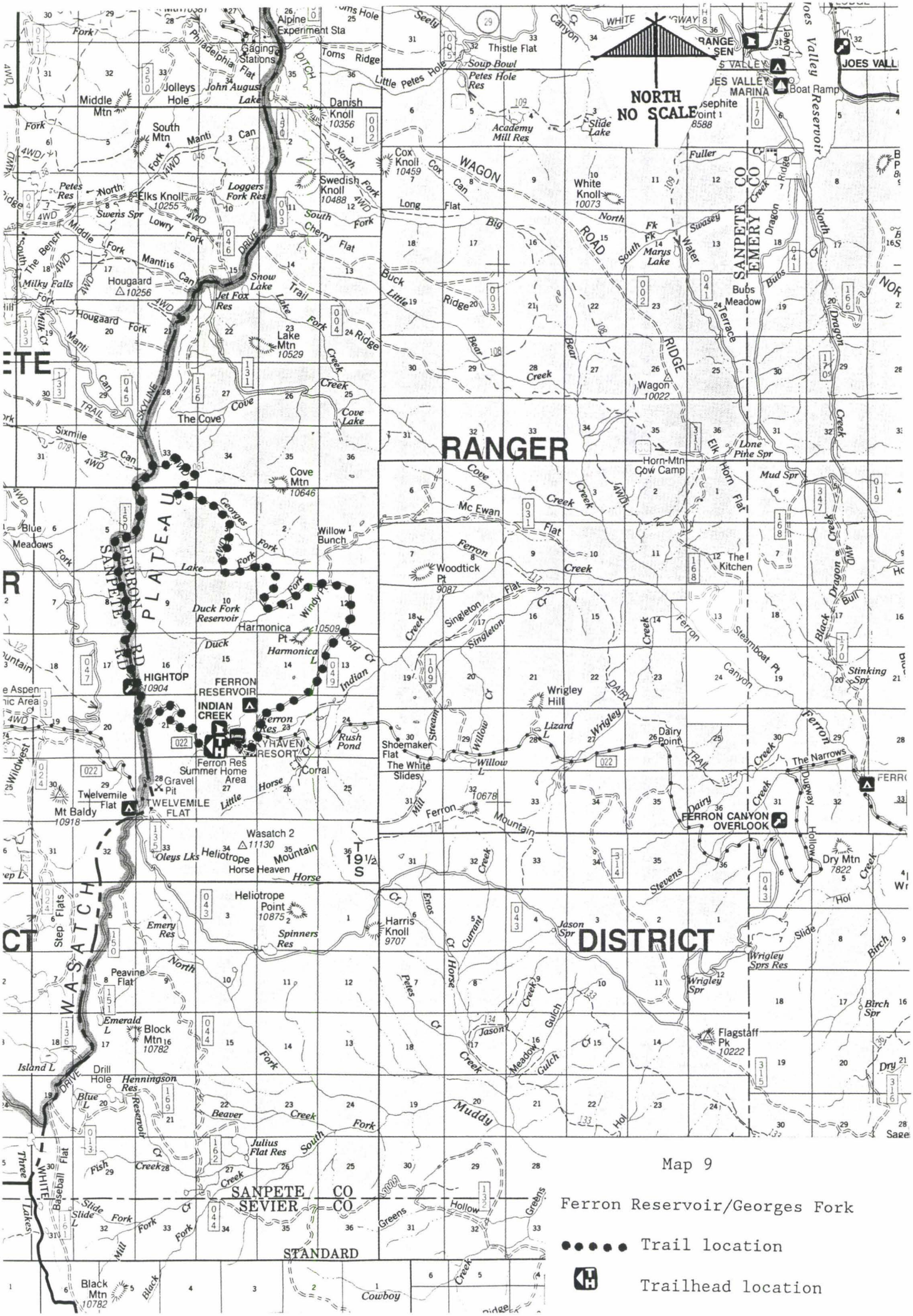
FERRON RESERVOIR TRAILHEAD

Ferron Reservoir/Georges Fork Loop Trail: Map 9

This trailhead originates at an elevation of 9,500 feet at the Ferron Reservoir campground on the shoreline of Ferron Reservoir. The trail follows a road along the south side of the reservoir (FR #022) to the junction of FR #049. This dirt road takes the user over a rolling terrain through small meadows and aspen and conifer stands. Several openings appear to give the visitor a breathtaking view of adjacent mountain peaks and valleys. At Duck Fork Reservoir, the road quickly changes into a narrow trail restricted to vehicles under 40 inches in width. This five mile segment is strictly an ATV trail with a recent mud slide across an old two track road that has stopped regular vehicle travel. At the junction of Georges Fork and Skyline Drive (FR #150) the route turns south towards Hightop, the highest point on Skyline Drive, at an elevation of 10,904 feet. Just south of Hightop the route turns onto FR #022 for 3 miles back to the trailhead. The length of this loop trail is approximately 16 miles.

This trail offers a variety of trail conditions and scenic vistas. Trout can be caught in both Ferron and Duck Fork Reservoirs. There are many places for dispersed camping and solitude. From Skyline Drive it is possible to see into valleys below or view other mountain ranges many miles away. This trail system is adequate to facilitate ATV use and to provide a

challenge to the user on the Georges Fork trail segment. (A trailhead will need to be developed here.)



Map 9

Ferron Reservoir/Georges Fork

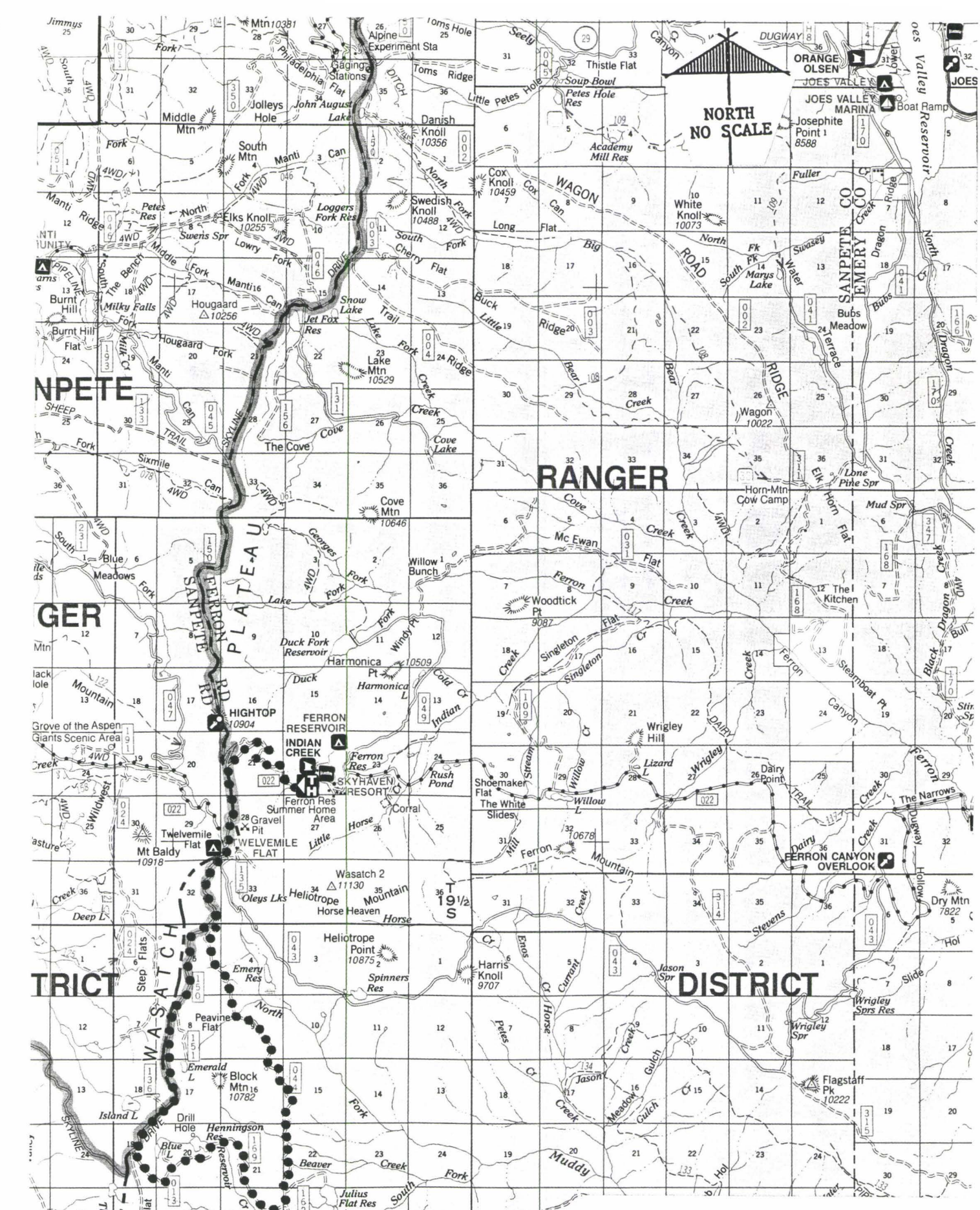
●●●●● Trail location

TH Trailhead location

Ferron Reservoir/Skyline Drive Loop Trail: Map 10

This 23 mile loop trail starts at Ferron Reservoir Campground at an elevation of 9,500 feet. It quickly climbs to 10,500 feet to Skyline Drive (FR# 022) where it turns south on FR #150 for six miles of scenic beauty. It is possible to view into the valleys on either side of the mountain top. This section of trail passes adjacent to Twelve Mile Flat Campground and Emerald Lake. The next leg of the trail is along FR #169 which takes the user by Blue and Henningson Reservoirs. Along with Emerald Lake, the user has the opportunity to stop and fish for trout in these clear mountain waters. The loop back to Skyline Drive is on FR #044 where the route backtracks to the trailhead.

This loop consists entirely of forest system native material (dirt) roads. These roads become very slick when wet and offer the user some degree of difficulty. No construction or reconstruction is necessary on this trail. This loop provides many open vistas, meadows covered with a variety of wild flowers, small streams and scattered patches of aspen and conifer tree stands. A trailhead facility will need to be developed for this loop.



Map 10

Ferron Reservoir/Skyline Drive Loop

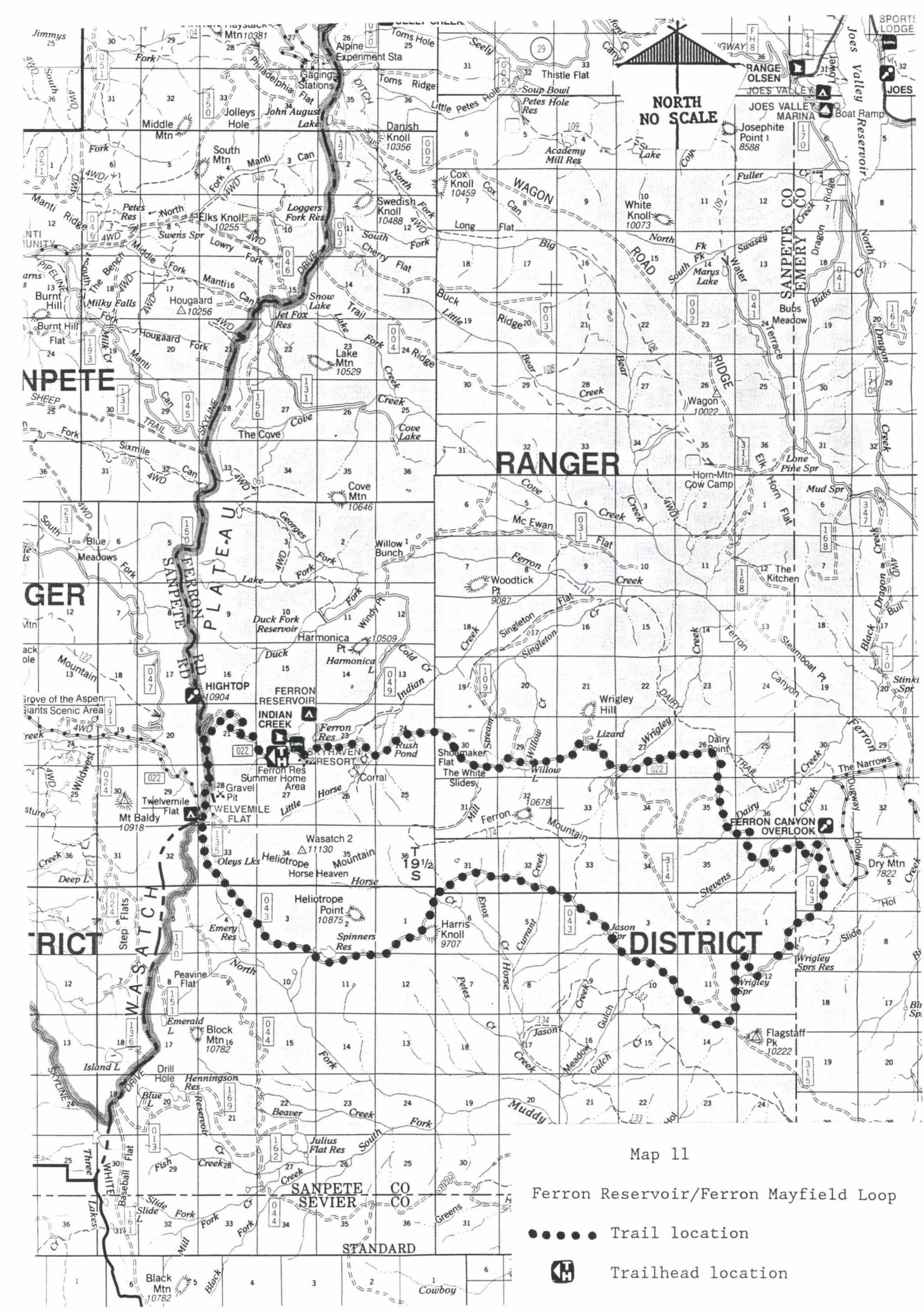
●●●●● Trail location

TH Trailhead location

Ferron Reservoir/Ferron Mayfield Loop Trail: Map 11

This loop is approximately 31 miles long with its origin at Ferron Reservoir at an elevation of 9,500 feet. After traveling for 3 miles on FR# 022, and rising to an elevation of 10,000 feet, the trail turns on Skyline Drive FR# 150. After passing Twelve Mile Flat Campground the route connects to FR #043, a low standard dirt road. This segment of trail is filled with a variety of scenery as it travels through scattered stands of conifer and aspen, small meadows covered with a variety of flowers and small reservoirs such as Wrigley Springs and Willow Lake where trout fishing abounds. The route provides many open vistas as it is possible to view adjacent mountain peaks as well as those in the far distance. After traveling 14 miles on this trail segment the route joins with FR #022 which returns the user to the trailhead. This last 12 mile section is located on a native surface (dirt) road.

This loop trail will need no additional maintenance to facilitate ATV use. However, a trailhead will need to be developed.
FR #022 receives moderate use by other vehicles other than ATV's. There are many places along this loop trail for dispersed camping, picnicking and solitude.


NORTH
NO SCALE
RANGER
DISTRICT
SANPETE CO
EMERY CO
SANPETE
SEVIER CO
STANDARD
FERRON RESERVOIR
INDIAN CREEK
SKYHAVEN RESORT
Ferron Res Summer Home Area
TWELVEMILE FLAT
HIGHTOP 10904
FERRON CANYON OVERLOOK
JOES VALLEY MARINA
Boat Ramp
RANGE OLSEN
SPORTS LODGE
Alpine Experiment Sta
Gaging Stations
Josephite Point 8588
Wagon 10022
Lake Mtn 10529
Cove Mtn 10646
Harmonica Pt 10509
Woodtick Pt 9087
Wrigley Hill
Dairy Point
Wasatch 2 11130
Heliotrope Point 10875
Harris Knoll 9707
Flagstaff Pk 10222
Dry Mtn 7822
Mt Baldy 10918
Black Mtn 10782
Block Mtn 10782
Danish Knoll 10356
Swedish Knoll 10488
Cox Knoll 10459
White Knoll 10073
Elks Knoll 10255
Hougaard 10256
Middle Mtn 10381
South Mtn
Jolleys Hole
Thistle Flat
Soup Bowl
Petes Hole Res
Academy Mill Res
Loggers Fork Res
Jet Fox Res
Duck Fork Reservoir
Ferron Res
Spinners Res
Emery Res
Julius Flat Res
Henningson Reservoir
Marys Lake
Bubs Meadow
Lone Pine Spr
Horn-Mtn Cow Camp
Mud Spr
The Kitchen
Steamboat Pt
The Narrows
Wrigley Sprs Res
Wrigley Spr
Jason Spr
Shoemaker Flat
The White Slides
Gravel Pit
Corral
Rush Pond
Lizard L
Willow L
Mill L
Deep L
Island L
Emerald L
Blue L
Slide L
Three Lakes
Peavine Flat
Step Flats
Drill Hole
Baseball Flat
Willow Bunch
Mc Ewan Flat
Horse Heaven
Oleys Lks
Meadows
Burnt Hill
Burnt Hill Flat
Milky Falls
Sixmile
The Cove
Cove Lake
Swens Spr
Lowry Fork
Middle Fork
South Fork
North Fork
Manti Can
Manti Ridge
Petes Res
Toms Hole
Toms Ridge
Little Petes Hole
Danish Knoll
Long Flat
Big Ridge
Buck Ridge
Bear Ridge
Lone Pine Spr
Elk Horn Flat
Dragon Creek
Swasey Creek
Fuller Ridge
Joes Valley Reservoir
Grove of the Aspen Giants Scenic Area
Wildwest
Skyline Drive
Pipeline
Sheep Trail
Ferron Sanpete Rd
Sanpete Plateau
Wasatch
Dairy Trail
Stevens Canyon
Muddy Creek
Cowboy
Greens
Fish Creek
Beaver Creek
Ferron Mountain
Horse Mountain
Mill Creek
Slide Fork
Black Mtn 10782
Map 11
Ferron Reservoir/Ferron Mayfield Loop
Trail location
Trailhead location

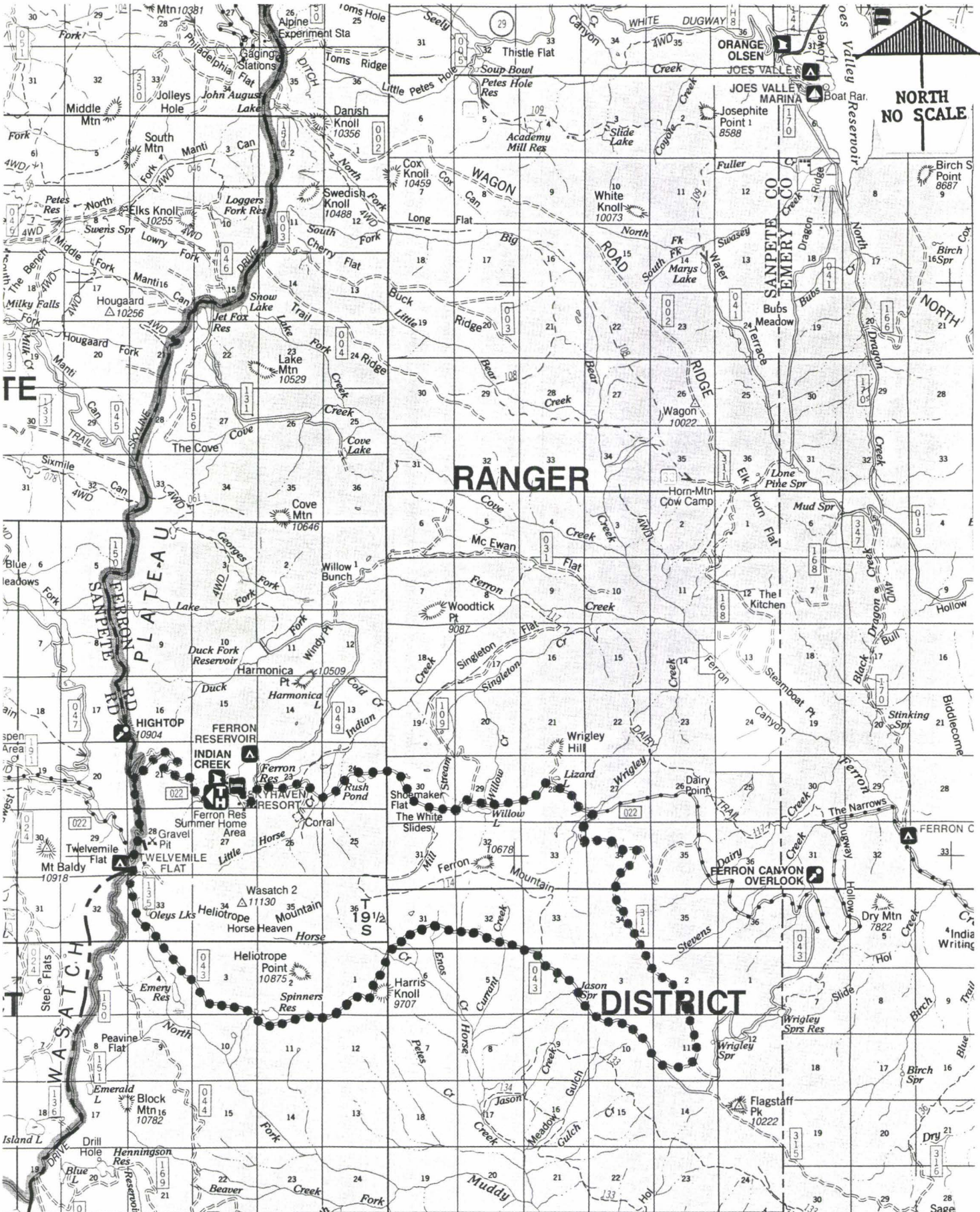
Ferron Reservoir/Hunters Highway Loop Trail: Map 12

Starting at Ferron Reservoir, this loop continues over a distance of 27 miles. The first 3 miles is on FR #022 which is a quick jump from 9,500 feet to 10,000 feet in elevation. The route continues south on FR #150 (Skyline Drive) for 2 miles where it is intercepted by FR #043. The route continues on for 9 miles through very scenic vistas consisting of open meadows, wide varieties of wild flowers, small lakes and ponds, and scattered aspen and conifer patches of timber. A low standard dirt road makes up the next segment of the trail (FR #314). This two track road proceeds through an area where it is possible to catch a glimpse of a mule deer or small herds of elk grazing in grass covered meadows. The final leg of the loop is accessed on FR #022. After taking time out to fish for trout at Willow Lake, the user has only a short ride of 8 miles to be back to the trailhead at Ferron Reservoir.

There are many places along this loop to camp, picnic or just enjoy the solitude and beauty of nature.

The described transportation route is adequate to facilitate ATV use. FR #022 receives moderate use from vehicles other than ATV's.

A trailhead will need to be constructed at Ferron Reservoir.



Map 12

Ferron Reservoir/Hunter Highway Loop

●●●●● Trail location

TH Trailhead location

WRIGLEY SPRINGS RESERVOIR TRAILHEAD

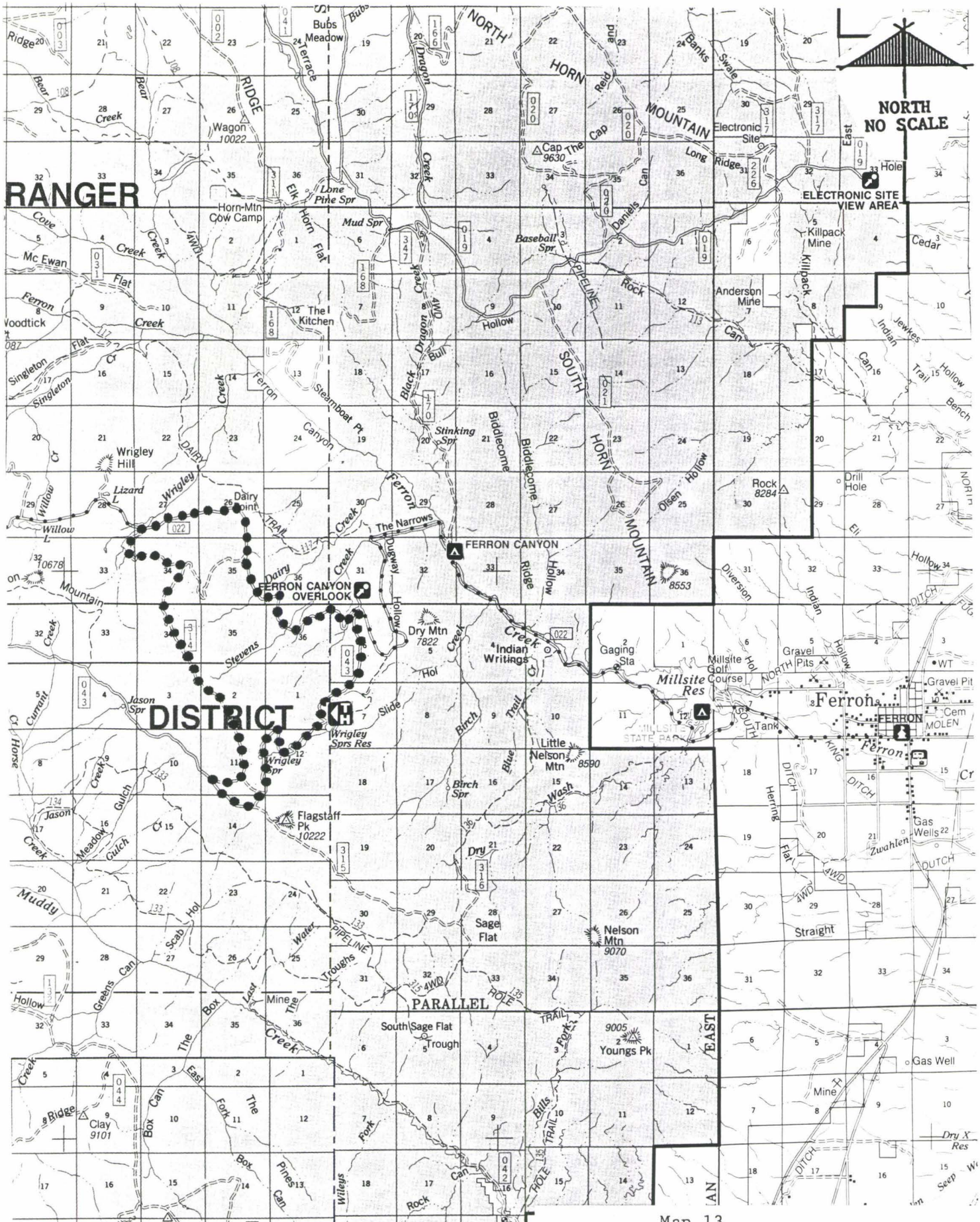
Wrigley Springs Reservoir Loop Trail: Map 13

Wrigley Springs Reservoir is a small reservoir that receives heavy fishing pressure and provides a variety of other dispersed recreation activities. Two loop trails can be accessed with the construction of a trailhead facility adjacent to the reservoir.

The first loop is approximately 12 miles long, originating on FR #043 adjacent to the reservoir; it is a low standard dirt road. After traveling two miles, the trail intercepts FR #022 and continues west for 5 miles. Here the trail turns onto FR #314 and after traveling 5 miles on a low standard dirt road the trail loops back to the trailhead.

This loop takes the user through open meadows covered with mountain flowers and in view of majestic Ferron Mountain. It is possible to observe mule deer and elk feeding along this route. Elevation ranges from 8,900 feet to 9,200 feet.

The present road system is adequate to handle ATV use. A trailhead will need to be developed.



Map 13

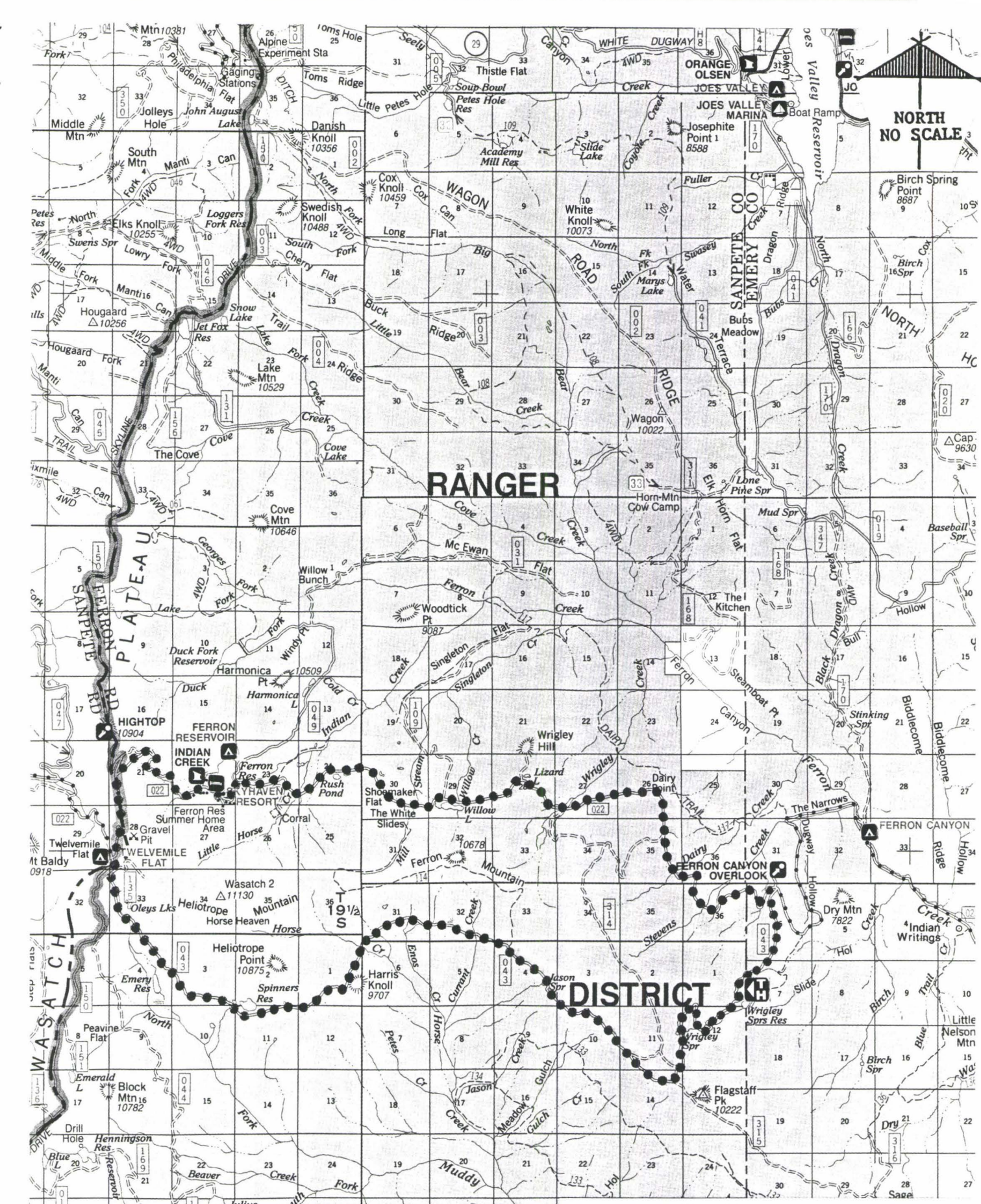
Wrigley Springs Reservoir Loop

Wrigley Springs/Muddy Loop Trail: Map 14

This loop starts at Wrigley Springs Reservoir on FR #043 at an elevation of 8,900 feet. It follows this dirt road for 2 miles to the junction of FR #022. This section of the route takes the user by Willow Lake and Ferron Reservoir on route to Skyline Drive (FR #150) to an elevation of 10,500 feet. After traveling for two miles on Skyline Drive, the route again meets up with FR #043 and continues for 12 miles back to the trailhead.

This route offers a spectacular 28 mile tour as it takes the rider through flower covered meadows, aspen covered ridges and wide panoramic vistas of the valley below. Several small lakes lay adjacent to the route where trout are just waiting to be caught. There are many dispersed camping areas and areas where one can enjoy the beauty of nature and solitude.

The present road system is adequate to sufficiently handle ATV use. A trailhead will need to be developed at Wrigley Springs Reservoir.



Map 14

Wrigley Springs/Muddy Loop

●●●●● Trail location

TH Trailhead location

Trailheads

There will be several trailheads developed since loop trails are located throughout the district. Trailheads will be developed on relatively flat surfaces with adequate parking space. The site will accommodate vehicles with trailers in a pull-through pattern of entry and exit, an unloading ramp, and toilet facilities as needed.

Level IV: Trail Completion

Stage IV discuses the remaining items to be completed before the trail is open to public use.

Brochure & Map

Development of a quality informational ATV brochure along with a trailhead is important to the success of a trail system. This brochure needs to be developed early if it is to be completed at the time the trail systems are ready to be opened. The brochure can be distributed through the various agency offices, from the ATV site, ATV groups, and through local dealers. A good brochure should have the following characteristics:

1. An attractive front cover.
2. General area map.

3. A brief introduction that includes a few important trail rules to be followed.
4. "Tread Lightly" pledge and any other resource or environmental protection reminders.
5. Local vicinity map.
6. Contact points for additional or emergency information.
7. Trail Log - showing trail numbers and trail length.
8. Recreation Site Index listing camp units and available facilities.
9. Detailed map of trail with adequate legend.

Step one is to acquire approval for the brochure before work actually begins on text, design or layout. This is done by submitting a Publication Proposal form (FS-1600-6) to the Regional Publications Control Officer regardless of production method or estimated cost. If multiple colors (excluding maps) are going to be used, a justification statement will need to be attached to the proposal form. The proposal is then reviewed and approved or disapproved by the Regional Publications Control Committee.

A draft design is completed with the assistance of the Forest Landscape Architect in the Supervisor's Office. The final design can then be produced on the originating unit, contracted out, or printed in the Regional Office, depending on cost.

The originating unit must budget printing funds. Presently, forests may print approved publications costing less than $500 locally. Items over $500 are printed by the Government Printing Office.

The publication process takes about 3 months or more from concept to completion.

Signing

Another important key is signing, which needs to be planned well in advance of trail construction. Carsonite signs have been used on our district which have proven to be effective and cost efficient. They have been used to identify trail areas and roads that are closed or restricted to use.

A large wooden bulletin board located at the trailhead will be an effective way to identify the trail starting point.

The "Tread Lightly" theme should be incorporated on signs at trail starting points and as visual reminders throughout the route.

Information signs, usually made of wood, could be placed along the route to designate scenic features. Sign planning should begin when fieldwork on loop trails is being done. This will

help make it possible to order the needed signs when the trail plan is approved.

Budget

What will the loop trail systems cost? "The cost of constructing ORV (Off-Road Vehicle) trails varies from $1,800 to $2,000 per mile," according to the engineering staff in the Forest Supervisors Office. The proposed budget for the Trail Systems is $30,000:

Trail Construction.....$24,000
Trailhead Development.....$4,500
Signing.....$1,500

A portion of the project proposal has been submitted to the State for assistance with funding from the Utah State Off-Highway Vehicle program, future plans are to continue to work with them for additional funding until the trail system is complete.

Construction and Maintenance

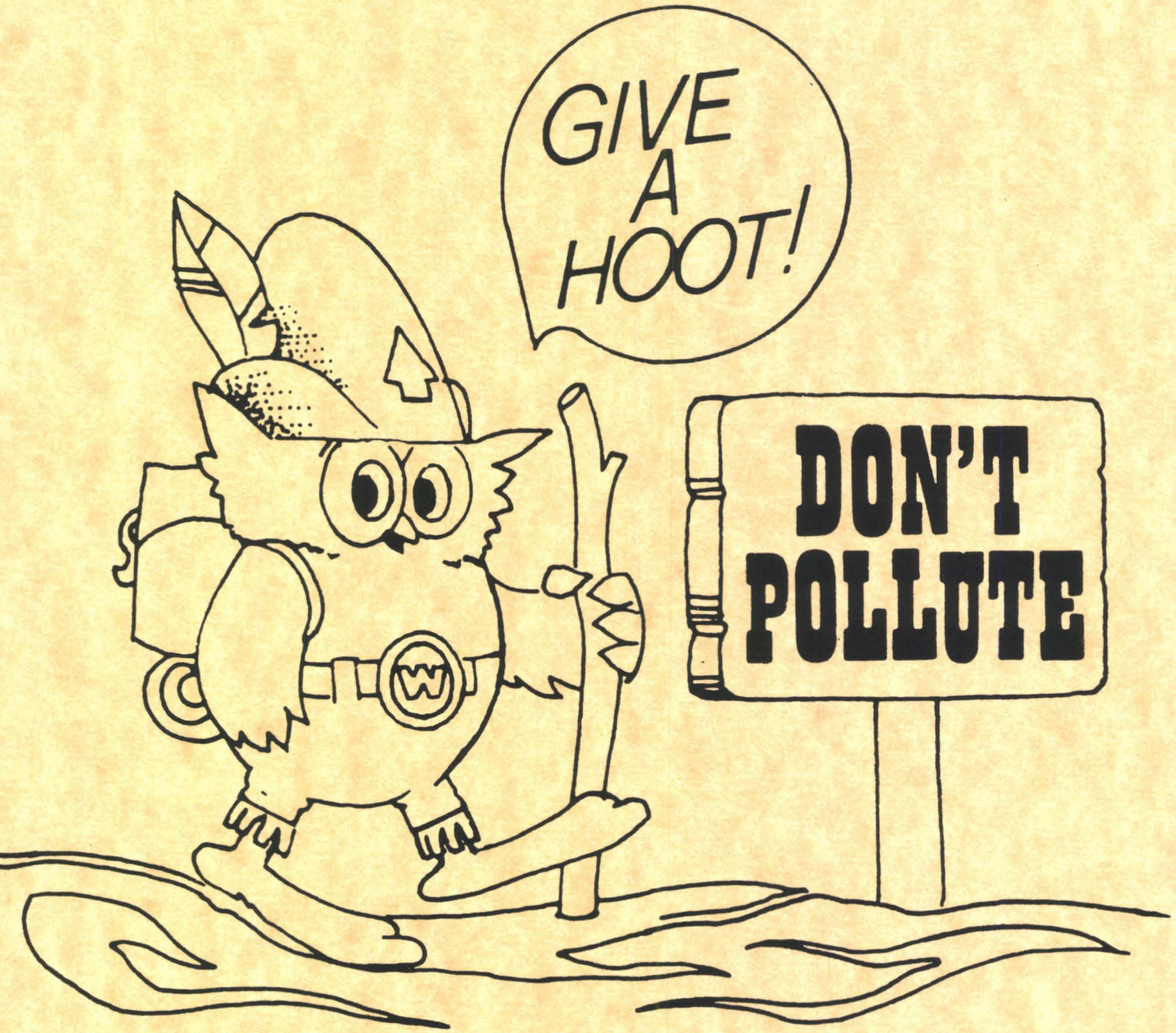
Construction and future maintenance is the final stage of trail development. The trails can be constructed by the use of volunteers, district trail crews, or contractors when funds become available.

Volunteers are an important resource and have been used for maintenance of some of the established trails. Organized ATV association groups have expressed an interest in the further development of these trails and have offered assistance in completing these loops. Many Boy Scout troops in the area have also volunteered to work on different trail segments.

With an increased interest of user groups, there may be an opportunity to turn the maintenance of some of these trails over to the user. This would create opportunities for private enterprise to promote ATV development.

It is important to develop a monitoring plan for the trails to insure they are maintained at a safe standard and are of value to the various users. Since these 14 trails will be managed for a variety of users it will be necessary to obtain feed back to be certain that user conflicts do not occur, or will be held at a minimum. This feed back will help determine future use, impacts, and management strategies for these trails.

CONCLUSION



IV. CONCLUSION

The challenge on the Ferron Ranger District continues to be that of providing opportunities for various kinds of recreation uses and managing the accompanying problems associated with them.

It is anticipated that the development of ATV loop trail systems will provide opportunities for other recreation users as well. Motorcyclists, mountain bikers, horsebackers and hikers have enjoyed a recently constructed ATV loop trail. Parts of this trail also serve cross-country skiers and snowmobilers during the winter months. When the Trail Management Plan is approved and other ATV loops are completed, similar opportunities will be available.

A variety of users on trail systems supports one of the goals in the Forest Plan which states "Offer a broad range of dispersed and developed recreation opportunities by providing appropriate recreation experiences and setting levels." (page III-2, Manti-La Sal National Forest Land Management Plan).

Sales of 3-wheel ATVs are now illegal. The more stable 4-wheeler is still popular. ATV development in the future may result in a street-legal vehicle that can be used or driven anywhere.

Due to the continuing increase in sales of ATVs, which reflect their continuing popularity, Utah is expected to surpass the 179,000 vehicles that are currently in use. As mentioned earlier, 500,000 vehicles are sold each year nationally. Recreation and industry personnel project that ATV use will equal or surpass motorcycle use within a few years. This projected recreational need means that ATV enthusiasts, dealers and recreation managers need to work together to fulfill the future demands of this sport.

The code of the Pacific Northwest Four-Wheel-Drive Association serves as a standard to the sensitive ATVer:

> "As members of the American public who operate four-wheel-drive vehicles to enjoy the awe-inspiring scenery of our mountains, valleys, deserts, forests, marshes and meadows, and all the other back country areas of the nation, we will... leave the land and its vegetation as we find it. Help preserve plant life and soil by limiting travel to established roads and trails. Avoid cutting switchbacks and driving through moist meadows which will leave permanent scars.
>
> ...Protect the history of the nation by not disturbing old mining camps, ghost towns, diggings or other historical or natural values.
>
> ...Respect the rights and property of other user groups, such as miners, ranchers, fisherman, hunters, and

other recreationists. Conduct all trips in a safe and sane manner.

...Accept the responsibility of keeping the back country beautiful by packing out litter.

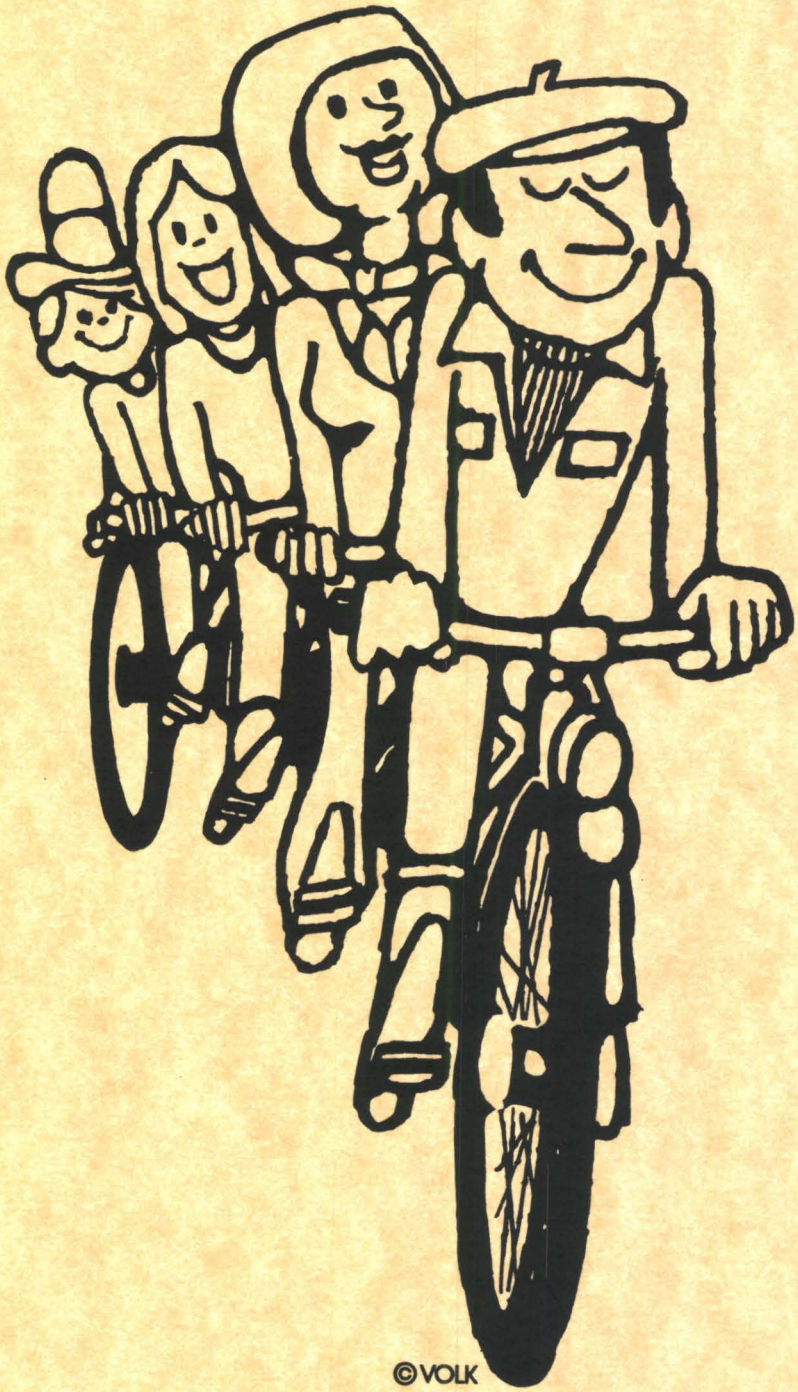
...Give everyone we meet the courtesy of the road as safety and courtesy are contagious.

...Observe the local history, the geology of the land and the ecology of the vegetation so that we may more fully appreciate the splendor of our national heritage." (Woods 1981)

Personnel on the Ferron Ranger District recognizes ATVs as a legitimate use on National Forest Lands. The District can and will provide ATV opportunities in appropriate locations while protecting the resources. ATV problems will not go away, but they can be successfully managed. However, a successful ATV program will require the efforts of all resource managers to insure that the effects of the program are positive.

With these ideas in mind, the Ferron Ranger District is becoming a leader in TQM (total quality management) characterized by managers and employees with positive attitudes and commitment of time and resources in accepting and managing ATV recreation use.

MONITORING PLAN



MONITORING PLAN

A trail Condition Monitoring Form (Figure 4 page 83) was developed to assist the land manager in the evaluation of current (base line) trail conditions and to access the resource condition and how various users are affecting it. This form was developed to be user-friendly to all levels of the organization, It's primary purpose is to document the condition and changes occurring to a specific trail in relation to the types of uses, both authorized and unauthorized that are occurring.

Monitoring points were established to provide the specific site information required to make decisions and to monitor decisions relative to the types of multiple uses permitted on specific trails.

Fourteen trails requiring on-going monitoring (up to 5 years) are identified on the Ferron Ranger District. The decision to monitor these trails was based on the following criteria:

(1) public scoping resulted in specific resource issues of multiple-use on the trail: (2) the identified can handle multiple use but verification is needed. (3) some users were questioned allowing multiple users on specific trails and were sure damage would occur.

Monitoring points were located at known resource problem areas, and locations identified on the ground having a high potential for future damage resulting from multiple use (steep slopes, wet areas, stream crossings, etc.).

Each monitoring point will be surveyed annually and the results documented on the Trail Condition Monitoring Form (Figure 5 page 84). The results from this monitoring will be used for: (1) verify that the decision made to allow ATV's was correct: (2) correct minor damage or relocate short sections of trail impacted by authorized use; (3) determine if unauthorized use is occurring and document damage resulting from that use: (4) modify the uses on a trail where excessive resource damage is occurring, and cannot be corrected within District budget allocations: (5) Verify that information requested on the Trail Condition Monitoring Form is user-friendly and provides the manager with the information needed to adequately manage their District trail programs.

Safety Concern Monitoring

A safety monitoring Form for Multiple Use Trails and a Trail Visitor Accident and Complaint Documentation Form for incidents involving multiple use trails (Figure 6,7,page 85, and 87) were developed to help the land manager access and monitor visitor safety on multiple use trails. Their primary purpose is to allow the land manager

to establish safety monitoring points which can be evaluated through the use of Trailhead Questionnaires and visitor complaints. This will help reduce the amount of time in which employees would need to monitor safety on the ground.

Fourteen trails which require on-going monitoring (up to 5 years) were identified on the District and within the Forest Travel Plan and Map. The decision to monitor visitor safety on these trails was based on: (1) Public scoping resulted in specific safety issues of multiple use on the trail: (2) Potential safety concern areas were identified but the decision to accommodate multiple use was made with the stipulation that safety monitoring would occur: (3) Some users were against allowing ATV's on trails they used because of safety concerns.

The evaluation criteria established can monitor the degree of safety concern from any point on a trail. Using the factors of slope, tread, sight distance, and use in conjunction with a numerical ranking, a degree of safety concern can be established (Figure 5 page 84). Any area where a high safety factor is calculated will indicate the need to establish a monitoring point. These points are then cataloged and mapped and can be tracked through the trail visitor questionnaires and visitor complaint forms. The Complaint Documentation Form is then used to document complaints allowing the manager to: (1) verify areas of safety

concern: (2) correct problems in areas of high incidents: (3) verify accuracy of evaluation criteria (complaints are being made in areas surveyed as low or moderate safety risk areas):(4) support multiple use decisions made: (5) modify multiple use decisions made, based on documented safety considerations.

Social Concern Monitoring

Trail visitor questionnaires (Figure 8 page 89) were developed to provide the local manager information regarding the type of visitors using the 14 trails identified for monitoring on the Ferron Ranger District, and their opinions and attitudes regarding multiple uses on trails. These questionnaires are also necessary to effectively monitor the visitor safety. This questionnaire is to be used at trailheads identified for monitoring of that trail.

This questionnaire was developed to obtain: (1) degree of trail use and experience wanted by our customers: (2) time of day and season of the year various types of users visit the monitored trails: (3) percent of visitors who belong to an organized group and the trail activities that group promotes: (4) opinion on types of use permitted on trails and reasoning for opinion: (5) group size: (6) visitor demographics.

Figure 4
TRAIL CONDITION MONITORING FORM

TRAIL NAME: _____ DATE: _____ TIME: _____

CURRENT WEATHER CONDITIONS: _____

TYPES OF PERMITTED USE: (hiker, horse, ATV, bike) _____

SEASONAL RESTRICTIONS: YES NO EXPLAIN: _____

MONITORING POINT: (numerically with R= resource and S= safety monitoring point. example: 1R, 2S, 3R, 4R etc) R

LOCATION: (example: 1/4 mile east of trailhead. point identified by a metal post with a metal tag attached to the top of post) : _____

_____

_____

TYPE OF MONITORING POINT: (trailhead, tread depth or condition, surface or gully erosion, stream crossing, structure condition, etc.)

_____

_____

- TREAD DEPTH: PRESENT DEPTH = _____ PREVIOUS (BASE DATA) = _____

- SURFACE EROSION VISIBLE: YES NO

- GULLY EROSION VISIBLE : YES NO

- STANDING WATER OR POOLS : YES NO

VISUAL OBSERVATIONS: (active surface or gully erosion, degree of erosion since past visit, structure damage occurring from authorized or unauthorized use, evidence of inappropriate trail ethics or use, etc.)

_____

_____

_____

- IS RESOURCE DAMAGE OCCURRING FROM AUTHORIZED USE: YES NO

- TYPE OF DAMAGE: _____ DEGREE OF DAMAGE: L M H

- IS UNAUTHORIZED USE OCCURRING: YES NO TYPE _____

- IS RESOURCE DAMAGE OCCURRING FROM UNAUTHORIZED USE: YES NO

- TYPE OF DAMAGE: _____ DEGREE OF DAMAGE: L M H

- CAN THIS DAMAGE BE CORRECTED THROUGH ROUTINE TRAIL MAINTENANCE: YES NO

Figure 5
ANNUAL MONITORING SUMMARY/UPDATE FORM

199_

ENVIRONMENTAL CONDITION MONITORING SUMMARY

Total number of points monitored. ____

Total number of points where resource damage was documented. ____

Total number of points where resource damage resulted from authorized uses. ____

Total number of points where resource damage resulted from unauthorized uses. ____

Total number of points monitored where resource damage was corrected. ____

Total number of points monitored where resource damage could not be corrected through maintenance. ____

Total number of trail use designations modified because of damage. ____

SAFETY CONDITION MONITORING SUMMARY

Total number of points monitored. _____

Total number of documented incidents or accidents involving hikers, ATV's horses and mountain bikes using the same trails. _____

Total number of trail use designations modified because of safety concerns. _____

SOCIAL CONDITION MONITORING SUMMARY (QUESTIONNAIRES)

Total number of questionnaires received. _____
- total number received from trailhead boxes, _____
- total number received from all other locations, _____

Number of respondents who's primary method of travel is:
- Hiking _____
- mountain biking _____

Number of respondents who believe multiple uses can be compatible on the same trails. _____

Number of respondents who believe ATV's and other users are not compatible on the same trail. _____
- Because of resource concerns, _____
- Because of safety concerns, _____
- Because of social concerns, _____

Percent of respondents who support multiple users on the same trails.

Figure 6
SAFETY MONITORING OF ATV USE ON MULTI-USE TRAILS

The following is a list of factors and evaluation criteria which can be used to assist in evaluating safety factors when considering ATV use on multiple use trails. These factors should also be used to complete the attached "Safety Monitoring Form for Multiple Use Trails. Even though this evaluation can be used for all multiple use trail planning and monitoring, those trails restricting ATV use have not been evaluated for this project.

Explanation of symbols:

Slope

S1= steep slope (greater than 20%)
S2= easy slope (0-10%)
S3= moderate slope (10%-20%)

Tread

T1= smooth tread, no obstacles for 0'-100'
T2= smooth tread, no obstacles for 100'-100 yards
T3= smooth tread, no obstacles for more than 100 yards

Note: obstacles are considered to be rocks, stumps, roots, overgrown vegetation causing the trail to be less than 40" wide, and structures that would cause the ATV user to slow down considerably.

Sight Distance

D1= Open view of trail ahead for more than 200'
D2= Open view of trail ahead for 50'-200'
D3= Open view of trail ahead for less than 50'

Use

U3= heavily used trail
U2= moderately used trail
U1= lightly used trail

Due to various factors such as season, method of travel, permitted uses, ROS, this criteria should be ranked by the land manager. Criteria such as parties/hour, mile or trip may be used to establish use if current indicators do not exist.

Safety analysis:

Taking all four categories into consideration, a safety analysis can be acquired from any point on a trail. Simply add the sub numbers from all four categories to come up with a total. For example S2 + T3 + D1 + U3 = 9

Low safety factor= 4-6
Moderate safety factor = 7-9
High safety factor= 10-12

Note: If the monitoring point has a low or moderate safety ranking stop here. For high safety ranking complete Safety Monitoring Form.

Figure 6 continued

SAFETY MONITORING FORM FOR MULTIPLE-USE TRAILS

TRAIL NAME: _____ DATE: _____

MONITORING POINT: (points established numerically on trail, include S after number to indicate safety monitoring point. Example 4S) _____

LOCATION: (example: 1/4 mi. west of trailhead. point identified by a metal post with a metal tag attached to the top of post. Post located on south side of trail: _____

_____

EVALUATION: SLOPE ___ + TREAD ___ + SIGHT DISTANCE ___ + USE ___ = ____ (10+)
(Note: use criteria factor numbers from previous page)

COMMENTS: _____

_____

Figure 7
ACCIDENT OR COMPLAINT DOCUMENTATION
FOR ESTABLISHED MONITORING POINT

DATE/ TIME	TYPE OF INCIDENT (COMPLAINT/ACCIDENT)	USERS INVOLVED H, ATV, HORSE	CONTACT (NAME/ADD)	SOURCE OF INFORMATION
Example 11/24/90 1300	Complaint: hikers almost hit by ATV. No injury.	10 hikers 14 ATV's 5 horses	Larry French Phone Number City: State:	Questionnaire Ranger Station, Letter Phone Call

Additional Information: _____

_____

_____

Figure 7 continued

TRAIL VISITOR ACCIDENT OR COMPLAINT DOCUMENTATION FORM
FOR INCIDENTS INVOLVING MULTIPLE USE TRAILS

TRAIL NAME: _____ DATE: _____ TIME: _____

LOCATION: (be as specific as possible) _____

_____

_____

_____

_____

DESCRIPTION OF INCIDENT: (what happened) _____

_____

_____

_____

_____

_____

_____

_____

CONTACT: YOUR NAME: _____ PHONE NUMBER: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

OFFICIAL USE ONLY

AUTHORIZED USE: YES NO INJURIES: YES NO

ESTABLISHED MONITORING POINT: YES NO SHOULD IT BE ADDED: YES NO

COMPLAINT RECEIVED: IN PERSON:___ PHONE:___ LETTER:___ QUESTIONNAIRE:___

OTHER:___ COMMENTS:_____

FS EMPLOYEE:_____

Figure 8

TRAIL VISITOR QUESTIONNAIRE

You can help the Ferron Ranger District better manage your trails by taking a few minutes to answer this survey. We are trying to gauge what our visitors want from trail systems. Your responses will be used to determine what's working, and what needs improvement. Thanks for your help!

TRAILHEAD/ LOCATION:_____ DATE:_____ TIME:_____

How many days per year do you use National Forest Trails: (circle)

1-5 6-10 11-15 16-20 20+

Why do you use National Forest trails: (rank 1 most and 5 least important):

(a) Physical challenge or exercise ___
(b) Family or group activity ___
(c) Enjoy natural surroundings and scenery ___
(d) Get away from home surroundings ___
(e) Get away from the sight & sound of other people ___

What is your primary method of travel on Forest Service Trails: (circle)

Hiker Horse ATV

For your selected method of trail travel today, do you consider yourself:

(a) novice
(b) experienced (circle)
(c) expert

What is your preference for a trail trip (rank 1 highest, 4 lowest preference):

(a) 2 hour or less ____
(b) 1/2 day ____
(c) Full Day ____
(d) Multiple days ____

When do you most often use National Forest Trails: (circle)

(a) Spring
(b) Summer
(c) Fall

What time of day do you usually find yourself on the trail: (circle)

(a) Morning
(b) Afternoon
(c) Evening
(d) All times of the day

Do you belong to a trail club or other outdoor organization: (circle) Yes No

Figure 8 continued

Which of the following trail activities does your group participate in: (circle all that apply)

(a) Hike
(b) Horse
(c) ATV
(d) Mountain Bike

Have you previously encountered horses or hikers a trail: (circle)

Yes No If yes which trail:_____

Do you believe that horses and ATV use is compatible on the same trail:

(circle)

Yes No Comment:

Do you believe hiker and ATV use is compatible on the same trail: (circle)

Yes No Comment:

Do you believe that hiker, horse, ATV and mountain bikes are compatible on the same trail: (circle)

Yes No Comment:

If you answered NO to any of the above 3 questions, on which of the following do you base your answer: (circle all that apply)

- Resource concerns (damage to trail) Yes No Unknown

- Social concerns (noise of ATV's on the trail affects my experience): (circle) Yes No Unknown

- Safety concern (it is unsafe to mix hikers, mountain bikes, horses and ATV's on the same trails): (circle) Yes No Unknown

Yes No Comment:_____

Indicate your preference for the maximum number of other visitors seen and their maximum group size.

- Number of other visitors seen: 0-10 11-15 16-20 20+

- Group Size: 0-10 11-15 16-20 20+

Figure 8 continued

In our effort to provide for visitor safety on this trail while promoting multiple use for hikers, horses, mountain bikers, and ATV's on specific trails, it is important that any accidents or "close calls" between various users be reported. If an incident does occur please report it; in person, by phone or by writing, the Ferron Ranger District, Box 310, Ferron , Utah.
Phone: 801-384-2372.

How many people are in your group today:_____

Your City:_____ **State**_____

Comments:_____

_____

Thank You

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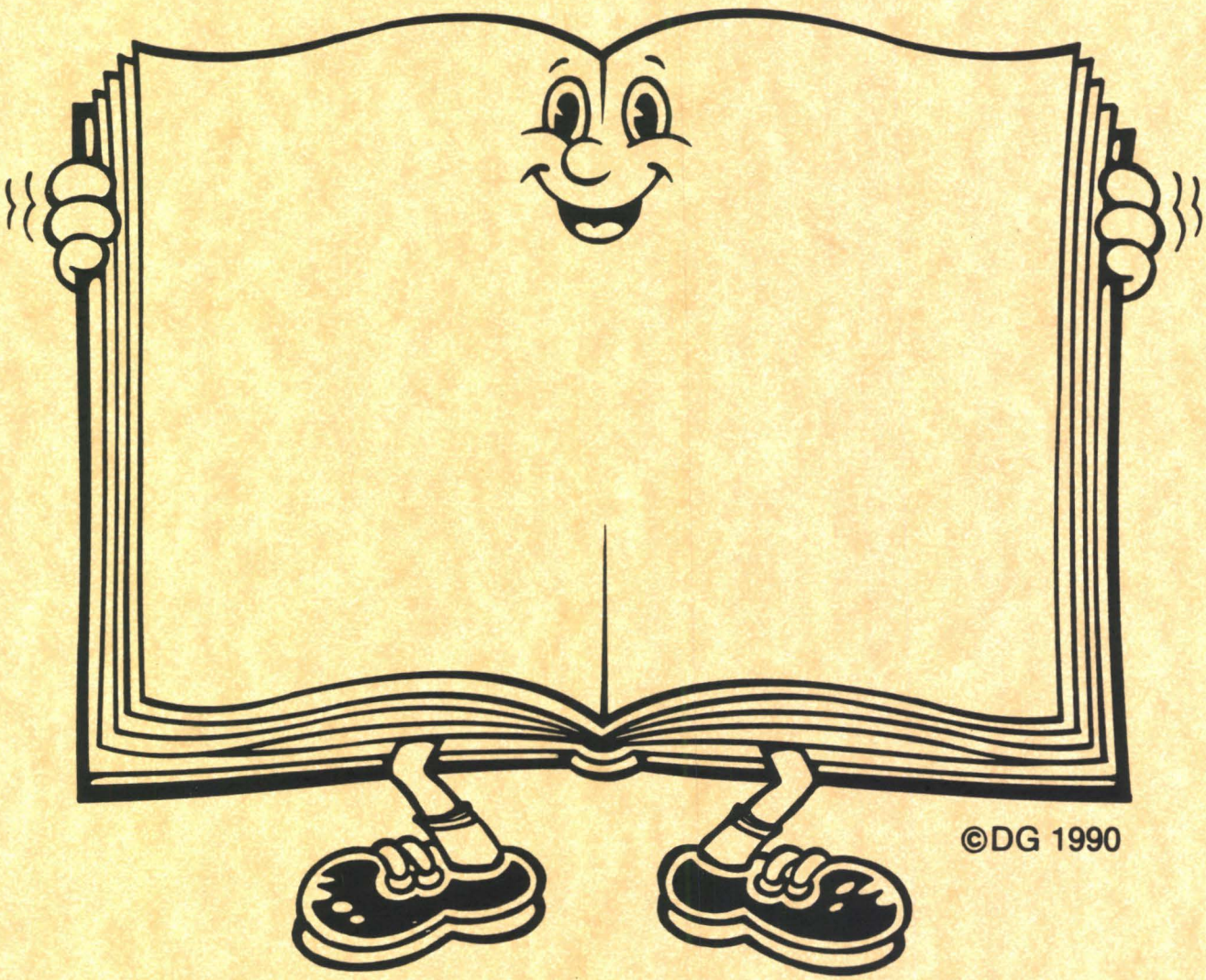

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